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CAUSES OF ABSENCES IN ONE GRADE OF FIFTEEN PUBLIC SCHOOLS IN WASHINGTON, D. C.¹

By LOUISE TAYLER-JONES, M. S., M. D.

This study was made by a committee of the District of Columbia Public School Association, of which the writer was chairman. It was carried out in the public schools of Washington, D. C., through the courtesy of the superintendent of schools.

The method of procedure was as follows: Each committee member has had the pupils of one school room to follow in regard to absences, so that there have been about 15 rooms studied. As cooperation of the teacher in each of these 15 rooms has been essential, it means that more than 30 people have been at work on this problem.

The grade chosen, on the suggestion of the superintendent of schools, was the 3 A grade, changing mid year to 3 B. Children in this grade are of the age when they first come under the compulsory school law. The schools were chosen from various parts of the city in an endeavor to include all kinds of economic conditions. Some schools were added because of the excellence of the teachers' work and the belief that their assistance would be of value. The following are the schools selected: Abbot, Blake, Henry, and Twining, from the central section of the city; Elizabeth Brown (in Chevy Chase); John Eaton (in Cleveland Park); John Burroughs (beyond Brookland); Takoma Park and Brightwood Park, from outlying districts; Park View, the platoon, or study-work-play school; Lovejoy, for colored children, one of the best equipped schools in the city; Force School, near Du Pont Circle, and the Morgan and Dennison Schools in the densely settled northwest section of the city. All absences from all causes were recorded for some 490 pupils in fourteen 3 A-B grades (13 white and 1 colored) and 1 open-window school from September 17, 1923, to June 18, 1924, inclusive—180 school days.

The teacher reported weekly to her committee member any absences of children in her room. The committee member had an individual record card for each pupil and marked up against that pupil any

¹This work was done by two principals of schools, three members of the educational section of the Twentieth Century Club, three members of the educational section of the Washington Branch of the American Association of University Women, and several members of the committee on health and sanitation of the District of Columbia Public School Association.

absences and their causes. All absences were classified arbitrarily by 7 causes, as follows:

1. Common colds.
2. Sickness other than colds. (What?)
3. Exposure to contagion. (What?)
4. Weather.
5. Truancy.
6. Religious holidays.
7. Other causes. (What?)

On the individual record card (see Chart 1) is a space for each school day in the year; Saturdays, Sundays, and holidays are crossed off. Absences are recorded by number, and explanations are made in the margin at the right for numbers 2, 3, and 7. The hypothetical record on this card shows that the child was absent September 28

Name <i>Mary T. Black</i> Sex <i>F.</i> School <i>Blank</i> Grade <i>3A-B</i>																															Total School Days in the Month	Total Days Absent	Cause	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Sept.																																10	1	Shopping
Oct.																																23	$\frac{1}{2}$	
Nov.																																20	0	
Dec.																																14	1	2 headache
Jan.																																22	2	2 upset stomach 2 cut hand
Feb.																																20	0	
Mar.																																21	2	
Apr.																																16	$2\frac{1}{2}$	
May																																21	$\frac{1}{2}$	7 Circus
June																																13	3	7 out of town
Total for Yr.																																180	$12\frac{1}{2}$	

CHART 1.—Sample of individual report card.

to go shopping. On October 5 she was absent one-half day, in the afternoon, on account of a cold. On December 12 she was out all day because of headache. In January she was out two days, the 10th and 18th, because of upset stomach and a cut hand, respectively. Absences on March 11 and 21 were caused by the weather. In April she was absent two and one-half days because of a cold, and on May 12 one-half day with the circus recorded as the cause of absence. In June she left three days before school closed. She was absent a total of $12\frac{1}{2}$ days of the 180 school days. The whole card shows very clearly and compactly the exact status of this child in regard to absences. There are nearly 500 of these individual cards.

Several difficulties were encountered, and these may be mentioned here as follows:

First. Pupils' cards have been kept, where possible, throughout the year. Pupils dropping out at mid-year (February 1), or going to another school on that date, have been recorded for the first half-year and not for the second half. This accounts for fewer pupils in the second half. Other pupils may, however, be entered then, so that in some schools the number of pupils studied in the first half is the same as that in the second half. In some instances teachers have reported on the same group of pupils by getting, after mid-year, the record of their pupils from other teachers. In a few cases new pupils have been added on February 1. In the open-window school, where attendance is expected only during a subnormal physical status, the average of the attendance was taken of a few, though the majority were there the full year. The final plan was that each pupil whose record was kept must have been recorded in attendance a half year at least, and preferably the whole year, and must account for every day of that time.

Second. Causes of absences are not noted by the teacher in her roll book. A note from the parent that Johnnie was sick or that Susie was needed at home is sufficient, except for a kindly inquiry from the teacher, who often learns the cause. The only record ordinarily kept by the teacher is that of absences. This special information as to cause of absence entailed extra work on the part of the teachers, and it may be noted that a statement has been made in most cases. Also, the trivial causes recorded in many cases convince one that the majority of statements may be regarded as true and, therefore, fairly valuable for an accurate study.

Third. A further interesting fact about absences led to errors that had to be carefully checked. After a pupil is absent three days he forfeits his seat and is no longer carried on the attendance roll. He may reenter two weeks later, having in the meantime recovered from chicken pox, or five weeks later, after whooping cough. The school records show only an absence of three days; our records will show an absence of 10 days in the case of chicken pox, for example, or of 25 days in the case of whooping cough. Fewer days will be recorded if the illness occurs during holidays or a vacation. The school method serves its purpose in the crowded condition of the schools, where it seems only fair to let waiting pupils have seats that might otherwise remain vacant for weeks. The official records of schools throughout the country that use this method—and most of them seem to do so—do not, however, contain an accurate record of school absences.

Fourth. There was a natural tendency among the teachers, on learning of certain trivial causes of absences, to urge better attendance. But this was discouraged, since the object of the study was to learn the facts of absences rather than to have corrections made.

The study of the individual pupil's card and of individual school absences could be carried out further with much profit, but only certain outstanding points will be presented in this paper.

Table 1 shows all absences of boys and girls in the 3 A-B grades according to the seven causes already enumerated. It may be noted that there is very little difference in absences of boys as compared with girls.

TABLE 1.—Number of days of absence of boys and girls in each 3 A-B grade, according to causes.

School.	Average number of boys.	Average number of girls.	Total days of absence.	Cause.													
				(1)		(2)		(3)		(4)		(5)		(6)		(7)	
				Colds.		Other illnesses.		Exposed to contagion.		Weather.		Truancy.		Religious holidays.		Other causes.	
				Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Abbot.....	8	10	280	29	30	43	107	0	0	9	8	0	0	13	11	12	15
Blake.....	15	5	175	34	0	47	6	0	0	20	1	0	0	4	4	42	16
Brightwood Park.....	10	11	162	18	44	16	15	0	0	9	18	2	0	6	11	12	10
Dennison.....	13	9	142	17	6	22	11	0	40	5	3	1	0	2	2	16	14
Elizabeth Brown.....	31	29	658	131	106	117	118	3	0	35	27	3	0	0	0	54	63
Force.....	13	13	349	25	42	73	102	0	0	12	16	0	1	6	0	22	50
Henry.....	14	13	222	75	40	22	13	0	2	12	7	0	8	15	14	8	6
John Burroughs.....	9	17	318	31	80	30	58	0	19	19	39	0	0	0	0	14	27
John Eaton.....	15	25	441	71	70	78	123	0	0	7	13	0	0	0	0	34	43
Lovejoy.....	18	23	590	77	78	61	107	16	82	30	52	0	0	0	4	50	63
Morgan.....	17	16	493	73	53	153	71	24	0	13	10	1	0	5	4	45	44
Park View.....	28	24	570	71	41	96	139	6	0	32	29	0	1	17	21	68	48
Takoma Park.....	19	21	412	35	32	111	77	0	0	27	48	4	0	4	0	28	28
Twining.....	13	6	166	65	21	19	26	0	18	2	3	0	0	4	0	3	4
Total.....	223	222	4,980	754	664	889	976	49	131	234	276	8	9	76	68	406	434

Under the different causes of absence, the common cold has become of increasing interest. In these records colds caused more than one-fourth of all days of absence (27.7 per cent) and constituted more than one-third of all illnesses (39.2 per cent). This in spite of the fact that coughs, sore throat, and bronchitis are not included. Chart 2 shows the average number of days of absence from colds per child in each of the fourteen 3 A-B grades and the open-window school. It is interesting to note that the open-window school shows the fewest number of days of absence from this cause; and in this connection it may be well to make several statements about this open-window class in the Blake School building. It is the only open-window school for white children in Washington. (There is also one open-window school for colored children.) The children are there because of their physical handicap. They are usually pale, undernourished, nontuberculous children, and are absent from school for other causes quite as much as children in the other schools. (See Charts 3 and 4.) They do seem, however, to be

entirely free from colds. (See Charts 2 and 4.) There were just eight days of absence among the 35 pupils in the open-window school in the first half of the year (September 17–February 1). Six of these eight days were just after Christmas vacation. Noting that the pupil who had caused four of the eight days had left the school after mid-year, inquiries were made, and the teacher explained that the girl's mother felt that the child had more illness because of the open windows. A study of the roll-book showing her record for the two months following her departure from the open-window school

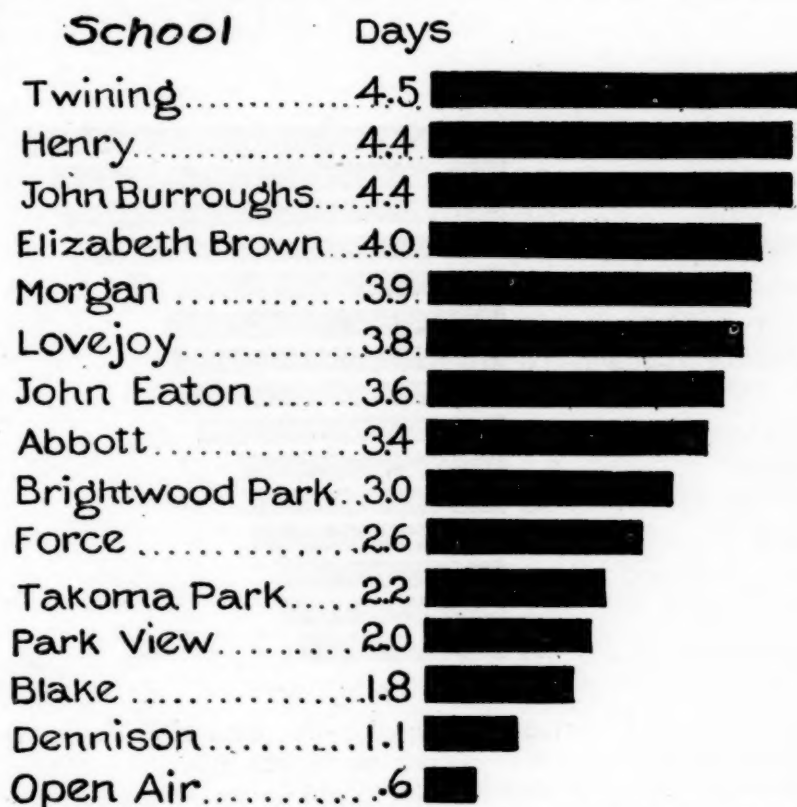


CHART 2.—Average number of days of absence from colds per child for the school year 1923-24.

showed more absence (an average of one day a week), and the same information was obtained from her roll book record preceding her entrance into the open-window school. This was the only complaint of the year. The teacher in this room states that members of the class are unusually free from contagious diseases. These children, on going to the grade school rooms temporarily for examinations, passed better and more uniformly so than other pupils of their ages and grades—an interesting fact, considering their rather

poor health and that they spend quite some time on the crafts. The apparent benefit to children, both physically and mentally, from schools of the open-window plan would indicate the desirability of extending this system. It would involve some additional appropriation for cots and blankets for the rest period and for extra food.

The time of year showing the greatest prevalence of colds varies somewhat in the different schools, but a sudden rise comes first with the advent of cool weather and furnace heat (over 50 days of absence in the first week in November), and again a peak comes in the winter (90 days of absence one week in January). It may be noted that colds are fairly evenly distributed between the boys and

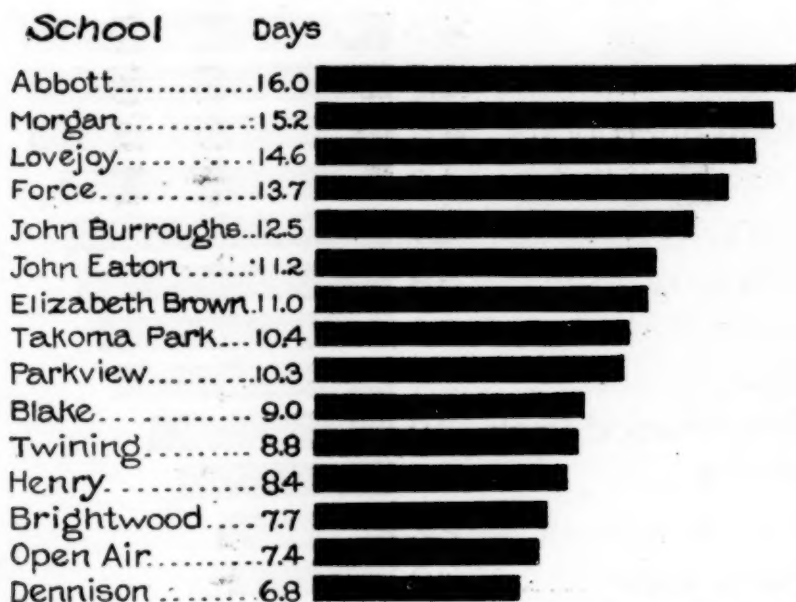


CHART 3.—Average number of days of absence from all causes per child for the school year 1923-24.

girls (see Table 1) in the 3 A-B grades—754 days of colds among 223 boys against 664½ days of colds among 222 girls.

Absences from other illnesses (No. 2) and absences from exposure to contagion (No. 3) will be discussed together. The term "other illnesses" (see Table 2) includes such respiratory conditions as bronchitis and tonsillitis. It also includes accidents and toothache. It does not, however, include dental work nor operations on tonsils. These two causes of absence are looked upon as work that can be done in nearly every case in vacation time, instead of in the 180 school days. This is reasonable, since less than half the days in the year are school days. Dentistry and tonsil operations are put under No. 7.

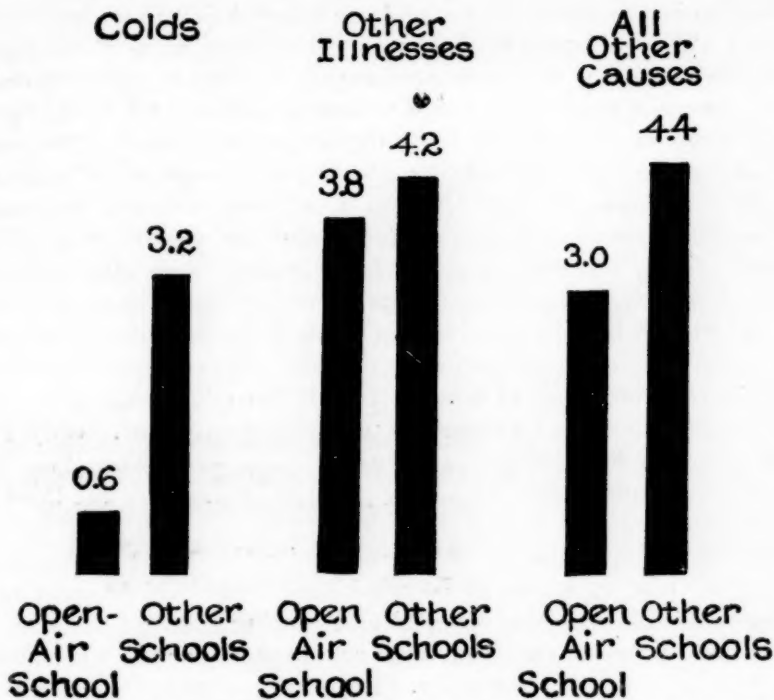


CHART 4.—Comparison of absences from colds, other illnesses, and from all other causes between open-air school and other schools studied.

TABLE 2.—Percentage of absences of illnesses other than colds.

Other illnesses (No. 2).	Approximate per cent of all absences under No. 2.	Other illnesses (No. 2).	Approximate per cent of all absences under No. 2.
Throat trouble.....	14.9	Impetigo.....	1.2
Digestive disturbances.....	14.7	Asthma.....	0.9
Chicken pox.....	13.6	Erysipelas.....	0.7
Scarlet fever.....	8.7	Measles.....	0.7
Headache.....	8.1	Reaction, Schick.....	0.5
Accidents and abrasions.....	6.7	Boils.....	0.5
Grippe.....	4.6	Fever.....	0.5
Toothache.....	4.3	Appendicitis.....	0.5
Earache.....	3.8	Kidney disease.....	0.5
Eye trouble.....	3.6	Rheumatism.....	0.4
Mumps.....	2.3	Malaria.....	0.4
Pain in side.....	1.9	Jaundice.....	0.3
Bronchitis.....	1.9	Illness totaling 5 days or less.....	1.8
Diphtheria.....	1.2		

There were few epidemics during the winter of the study (1923-24). Washington has probably not seen in years a school year so comparatively free from measles. Only two cases were reported in these 15 schools. There were no cases of whooping cough, and very little diphtheria (only two cases, both in the Lovejoy School). Chicken pox was more prevalent. (There were 24 cases, one-fourth of them

occurring in the Eaton School and the others being fairly well scattered.) The only real epidemics in Washington were of smallpox and scarlet fever. The former caused the absence of only one child in the schools studied, and that was for exposure. Of scarlet fever there were seven cases in six different schools. In the Twining School, where there were two cases, the total amount of absence would have been one-third less had it not been for these two cases of scarlet fever and one case of exposure to scarlet fever. The record of only one case of scarlet fever in each of six classes shows the care exercised to prevent the spread of contagious diseases in the Washington schools. Only two of these 3 A-B grades, Dennison and Henry Schools, reported no contagious diseases; nor were there any in the open-window school. Six of the schools did not have any absences because of exposure to contagion (No. 3). Only 180 days were recorded for this cause, which is 3.6 per cent of all causes. Three-fourths of these were among girls, and more than one-third of them were in the Lovejoy School.

In looking down the list of illnesses under No. 2, one realizes that many of these causes could be eliminated or at least brought to a minimum with adequate medical and nursing care. Toothache in sound and properly cared-for teeth should hardly exist. Yet about 75 days were lost for this cause. Impetigo is a skin condition that clears up in a few days with proper medical treatment, yet one child remained out 20 days from this cause. Earache would be greatly lessened with the throat in a healthy condition; yet there were more than 70 days lost with pain in the ear, and 230 days of absence were recorded for tonsillitis and other throat troubles. The large number of days lost on account of digestive upset is a commentary in itself.

There was a great deal of absence from eye trouble (67 days, or 3.6 per cent of the many causes under No. 2). Headache was an important cause too (156½ days, or 8.1 per cent of all causes under No. 2). Of course, all headaches were not due to eye strain nor were all eye troubles traceable to eye strain; yet it is possible that the physical examinations of all pupils of the first grade, begun this year as a part of the regular medical work, may eliminate much of the absence from these two causes.

The weather (No. 4) during the winter in which the study was made (1923-24) was unusually favorable for school attendance. In the first half of the school year there was no snow; there were only about five days on which there was much rain, and the rain was mild. In spite of this, the Abbott School had the only 3 A grade among the 15 with a perfect record for weather for the first half year. The second half of the year (February 1 to June 18), though mild, had

more rain and some snow. It is rather interesting to note that the school showing the best weather attendance for the whole year, with only $10\frac{1}{2}$ days' absence among an average of 30 pupils, was the open-window class. Dennison came a close second with $8\frac{1}{2}$ days' absence among 22 pupils. There is added interest in the fact that the open-window and the Dennison School have the best two records as regards common colds.

Boys were absent on account of rain almost as much as girls—234 days for the boys against $276\frac{1}{2}$ days for the girls.

We are dealing for the most part with 8-year-old pupils in the 3 A-B grade. They are just entering their compulsory-attendance age, and one would look for very little truancy (No. 5) among them. There are, however, only six schools entirely free from this cause of absence, several schools having one-half a day or one day against them. The total number of days of truancy is $17\frac{1}{2}$, or 0.3 per cent of all absences; and $9\frac{1}{2}$ of these days were among the girls. One girl stayed out eight days. This absence occurred early in the year and the girl's record afterwards was fairly clear. All cases of truancy occurred in the first two months of school. One boy had a perfect attendance record from his one truant day in October to the end of the school year.

Religious holidays (No. 6) do not, to any considerable degree, refer to the Christian religion, since such holidays are provided by law. They refer mostly to Jewish holidays. In a few cases they refer to preparation for communion in the Roman Catholic Church. One Greek Catholic child stayed away one day, giving religious rites as the reason. There was an absence from this cause amounting to 3 per cent of the absence from all causes. Boys and girls were affected about equally, but there was, naturally, much variation among the schools. There were no absences under No. 6 in three schools.

"All other causes" (No. 7) is a heterogeneous grouping, as might be supposed. This group includes a great variety of causes for absence, including the most trifling reasons. School days seem to provide the time, in some cases, for going to the dentist, to the oculist, to have a haircut, for shopping, and even for going to the movies and the horse show. The Parent-Teachers Association evidently found much absence due to a need of shoes, for they have provided a fund to meet such conditions. In spite of this, however, there are many absences resulting from the cause given as "no shoes."

There were surprisingly few cases of perfect attendance, only four schools (12 pupils) reporting such. Five of these pupils were in the Elizabeth Brown School, four in the Park View, two in the Dennison, and one in the Lovejoy. Seven of these were boys and five were girls. A good many pupils were absent only one-half day, colds and the circus predominating as to the causes in such absences.

To sum up the results of this study, it was found that in this particular group of school children—

- (1) Over 70 per cent of all absences are due to medical problems;
- (2) More than one-fourth of all absences are because of the common cold, and all respiratory disturbances constitute nearly 40 per cent of all absences;
- (3) Truancy is not a large problem at this age (8 years);
- (4) Boys and girls at 8 years of age seem to be absent about equally for all causes.

THYROID ENLARGEMENT AMONG MONTANA SCHOOL CHILDREN.

WITH NOTES ON THE POSSIBLE INFLUENCE OF THE PLACE OF RESIDENCE AND THE USE OF VEGETABLES AND DRINKING WATER UPON THE CONDITION.

By FRED T. FOARD, Acting Assistant Surgeon, United States Public Health Service.¹

The following study of the prevalence of thyroid enlargement among Montana school children was made through the examination of 13,937 school children during the school year of 1922-23. Sections of counties in the Rocky Mountains and at varying distances to more than 100 miles east of them were selected for the study with the view of comparing the prevalence of simple goiter among children residing in both mountainous and nonmountainous districts. The area included parts of Fergus, Carbon, Yellowstone, Big Horn, Lewis and Clark, and Hill Counties and all of Cascade County. Owing to the necessity of having to collect a part of the data included in this report through examinations conducted by different physicians, no attempt was made to classify the degree of thyroid enlargement found in individual children. Through previous arrangements made with the physicians participating in the survey, however, it was decided that doubtful cases would be classified as normal thyroid, rather than as enlarged thyroids. All children included in the study from Cascade, Hill, and Fergus Counties (6,321) were personally examined by the writer, and in the examination of the children included in the study from Lewis and Clark County (2,304) exactly the same method of examination was used as was used in Cascade, Hill, and Fergus Counties. The writer did not personally assist in the survey of Yellowstone, Big Horn, and Carbon Counties, but it was requested that data submitted for this report from Yellowstone, Big Horn, and Carbon Counties include only definitely enlarged thyroids. The data collected, therefore, represent a minimum rather than a maximum prevalence of thyroid enlargement among the children examined.

¹ For valuable assistance rendered in collecting the data included in this report, the writer wishes to express his appreciation to the health officers and school officials of Cascade, Hill, Fergus, Lewis and Clark, Yellowstone, Big Horn, and Carbon Counties.

The children examined represent all ages from 6 to 20 years, but in only two counties were children of high-school age included in the study. The total number of children examined and the prevalence of simple goiter among the children of each county are shown in Table No. 1.

TABLE NO. 1.—*Prevalence of simple goiter among school children of seven Montana counties.*

County.	Number of children examined.	Number having simple goiter.	Percentage having simple goiter.
Fergus	1,561	582	37.2
Carbon	1,923	583	30.4
Cascade	3,848	913	23.7
Yellowstone	2,312	430	18.6
Big Horn	1,077	182	16.9
Lewis and Clark	2,304	239	10.4
Hill	912	82	9.0
Total	13,967	3,011	¹ 21.6

¹ Average.

Of a total of 8,625 children personally examined by, or under the personal supervision of, the writer, the ratio of incidence in girls to that in boys was slightly more than two to one. Table No. 2 is given to show the incidence of thyroid enlargement among the school children of five counties in which the incidence, as classified by sex, was carefully noted. All ages from 6 to 20 years are included.

TABLE NO. 2.—*Incidence of thyroid enlargement among 9,321 school children, by sex.*

County.	Number of girls examined.	Percentage of girls having enlarged thyroids.	Number of boys examined.	Percentage of boys having enlarged thyroids.
Fergus	848	49.2	713	23.2
Carbon	1,913	39.4	1,010	22.0
Cascade	1,892	33.7	1,956	10.0
Big Horn	574	25.3	503	6.7
Hill	463	12.6	449	5.1
Total	4,690	¹ 32.0	4,631	¹ 13.4

¹ Average.

The ratio of incidence of thyroid enlargement in boys to that in girls in this group of children is 1 to 2.4.

It was found that those children living in the rural districts of Cascade County, where individual water supplies from wells or springs are used, had a greater incidence of thyroid enlargement than those children living in the city of Great Falls and other smaller towns of Cascade County where public water supplies are derived

from surface streams and where imported green and canned vegetables may be purchased. In the city of Great Falls, Cascade County, there was a thyroid enlargement incidence of only 19.2 per cent among 2,550 children of all ages and both sexes; whereas in Cascade County, exclusive of the city of Great Falls, there was a thyroid enlargement prevalence of 32.4 per cent among 1,298 rural school children of all ages and both sexes. All rural school children obtained their water supplies from shallow wells or surface springs. It was interesting to note that the nearer the homes of the rural school children of Cascade County were located to the Rocky Mountains or their tributary ranges the greater was the prevalence of enlarged thyroids. This condition was also found to exist among the children of rural schools in mountainous sections of other counties. The same condition was found to be true as applied to the proximity of whole counties to the Rocky Mountains or their tributary ranges. As shown by Table No. 1, Hill County, located approximately 150 miles east of the Rockies and having no tributary ranges within the limits of the county, had a goiter incidence of 8.4 per cent; whereas in Fergus and Carbon Counties, both of which are partially surrounded and intersected by a number of mountain ranges tributary to the Rockies, the goiter prevalence, including both sexes and all grade school ages, was 37.2 per cent and 30.3 per cent, respectively.

The municipal water supply of the city of Lewistown is derived from a very large flowing spring from which the water is piped throughout the city without exposure to surface drainage before entering the water mains. The volume and the lack of turbidity of water from this spring are uniform in wet and dry seasons alike, and the temperature of the water is the same, winter and summer, indicating that the source of the water is from a deeply located underground stream into which surface water does not gain entrance and which is unaffected by varying air temperatures. Repeated examinations have shown the water from this spring to be bacteriologically pure. Examination for iodine content, in so far as the writer could learn, has never been made; the following data, however, which were obtained through the examination of Lewistown school children, suggest a low iodine content. The goiter prevalence among all school children examined in Lewistown (1,561), including both sexes and all ages through high school, was 37.2 per cent. As classified by grade and high school ages there were 49.2 per cent of 485 grade school girls who had enlarged thyroids and 22.9 per cent of 450 grade school boys who had enlarged thyroids. Of 363 high school girls examined in Lewistown, 54.5 per cent were found to have enlarged thyroids, and of 263 high-school boys 23.5 per cent were found to have enlarged thyroids. The minimum and maximum

goiter prevalence among Lewistown grade school girls, as classified by age groups, varied from 24 per cent at 6 years of age to 83 per cent at 16 years of age, and from 20 per cent among boys at 6 years of age to 34 per cent among boys at 13 years of age. Among high school students the maximum goiter prevalence among girls was 58 per cent at 18 years of age and among boys 38 per cent at 17 years of age.

With the exception of the city of Lewistown the general rule in all counties in which the survey was conducted was that the enlarged thyroid prevalence was found to be decidedly greater in the isolated rural districts than in the towns and cities where public water supplies from surface streams were in use and where a greater proportion of imported green and canned vegetables was consumed. Owing to a short summer season and altogether uncertain temperatures until as late as mid-June, few vegetables are grown in Montana for the local markets. Most of the vegetables used in Montana cities are shipped from southern California producers. Few of these vegetables, however, reach the isolated rural districts. In a number of the isolated rural schools of the Belt Mountain district of Cascade County, where the enrollments varied from 5 to 15 children, the writer found all children of both sexes to have enlarged thyroids. On inquiry made of a number of children in this district it was learned that a considerable portion of vegetables used at their homes throughout the year were home grown and home canned. The general rule in Cascade County was that the prevalence of thyroid enlargement among the children of individual rural schools varied with the degree of isolation of the school district.

DISCUSSION AND SUGGESTIONS.

The original object in making the above survey was only to determine definitely the prevalence of simple goiter among the school children of Cascade County and, if necessary, to recommend for the children of Cascade County preventive goiter measures similar to those being carried out in Akron and other cities of the Great Lakes goitrous region, as suggested by Marine and Kimball. Interesting data obtained through the Cascade County survey, however, suggested that the survey be extended to other counties in order that the general prevalence of simple goiter might be more definitely determined and some information secured as to its importance as a possible state-wide public health problem. While the one object of the survey was to determine the percentage of school children afflicted with simple goiter, the data obtained from all counties included in the study indicate:

(1) That simple goiter is prevalent among Montana school children to the extent that it should be considered a public health problem

of such nature that both preventive and curative measures should be applied through the public schools;

(2) That a more careful and a state-wide survey for determining the goiter prevalence should be conducted in Montana with the use of definite and uniform methods of examination in all counties;

(3) That a state-wide chemical study of Montana water supplies should be made to determine the variation, if there be a variation, in the iodine content of public water supplies used by municipalities and private water supplies used by individual families in districts where simple goiter is particularly prevalent; and

(4) That widespread publicity should be given through the medical profession and public health associations of Montana to the necessity for goiter preventive treatment for women during pregnancy.

PER CAPITA MEDICINAL REQUIREMENTS OF NARCOTICS.

Data Secured in a Narcotic Survey of Allegany County, Maryland.

By A. G. DUMÉZ, Pharmacologist, Division of Pharmacology, Hygienic Laboratory, United States Public Health Service.

In connection with the drug-addiction studies being carried out by the United States Public Health Service, a narcotic survey of Allegany County, Md., was made during the period May 8 to 28, 1924. The object of this survey was to secure accurate data on the quantities of narcotics used annually for medicinal purposes in a restricted area, so that a reliable basis might be obtained for computing the requirements of the country as a whole.

Allegany County, Md., was selected for this purpose for several reasons, namely, (1) because of its remoteness from the sea coast and boundary lines, where the greater possibility of obtaining narcotics might tend to vitiate the results; (2) because the county is fairly distant from and contains no large cities in which it is thought that abnormal conditions are more likely to prevail; (3) because the occupations of its inhabitants are quite diversified—farming, mining, rail-roading, and manufacturing being represented; (4) because the county is easily accessible from Washington. In other words, it was thought that Allegany County represents as nearly as possible a normal unit within easy reach of Washington where conditions prevail which can be taken as typical of the country as a whole.

The actual work of the survey consisted in visiting all of the narcotic registrants in the county and compiling from their records the amounts of narcotics dispensed or used during the period of one year. In all there were visited 69 physicians, 12 dentists, 20 retailers (pharmacists), 3 wholesalers (pharmacists), 1 veterinarian, and 5 hospitals and sanatoria. The records of each were examined in detail. These records showed that for the period July 1, 1922, to June 30, 1923, the following quantities of narcotics were dispensed or used:

TABLE 1.—*Total quantities of opiates dispensed or used.*

	Grains.
Opium.....	38,937
Codeine sulphate and phosphate.....	29,410
Morphine sulphate and hydrochloride.....	22,284
Ethylmorphine hydrochloride (dionin).....	4,724
Diacetylmorphine hydrochloride (heroin).....	1,940
Cotarnine hydrochloride (stypticin).....	788
Apomorphine hydrochloride.....	93
	Fl. oz.
Exempt preparations (paregoric, Bateman's drops, Godfrey's cordial, etc.).....	10,365

Total cocaine dispensed or used.

	Grains.
Cocaine hydrochloride.....	11,485

The equivalents of the foregoing quantities in terms of crude drugs are given in Table 2. In computing these equivalents the amount of anhydrous morphine present in opium has been taken as 10 per cent, of anhydrous codeine as 0.3 per cent, and of narcotine as 5 per cent. In computing the opium equivalent of the total quantity of opiates 855 grains of codeine sulphate have been subtracted from the 29,410 grains of codeine sulphate and phosphate, as this quantity can be extracted (on the 0.3 per cent basis) from the opium required to manufacture the stated quantities of morphine sulphate and hydrochloride, ethylmorphine hydrochloride, diacetylmorphine hydrochloride, and apomorphine hydrochloride. Likewise, the 788 grains of cotarnine hydrochloride have been omitted, as the quantity of narcotine which can be extracted from the opium required to manufacture the foregoing alkaloids and their derivatives is more than sufficient (on the 5 per cent basis) to yield this amount. In computing the coca leaf equivalent of the quantity of cocaine hydrochloride used, the yield of anhydrous cocaine has been taken as 0.5 per cent.

TABLE 2.—*Opium equivalents of opiates.*

	Grains of opium.
38,937 grains of opium.....	= 38,937
28,555 grains (29,410—855) codeine sulphate.....	= 213,219
22,284 grains morphine sulphate.....	= 167,130
4,724 grains ethylmorphine hydrochloride.....	= 36,560
1,940 grains diacetylmorphine hydrochloride.....	= 13,660
93 grains apomorphine hydrochloride.....	= 850
10,366 fluid ounces exempt preparations.....	= 18,906
Total.....	488,662
	= 69.81 pounds

Coca leaf equivalent of cocaine.

	Grains of coca leaves.
11,485 grains of cocaine hydrochloride.....	= 2,051,220
	= 293.03 pounds

The per capita consumption of opium for Allegany County on the basis of a population of 69,938 as found for 1920 by the Bureau of the Census, United States Department of Commerce, would therefore be 6.98 grains. In the case of coca leaves, it would be 29.32

grains. To supply the entire United States on this basis, taking the population to be 106,000,000, would require the annual importation of approximately 105,697 pounds of opium and 443,988 pounds of coca leaves.

It is thought that the quantities of narcotics dispensed or used in this county represent fairly accurately the medicinal requirements at present, except in the case of cocaine and the exempt preparations. A census taken for the year July 1, 1923, to June 30, 1924, would no doubt show a much smaller quantity of cocaine used, as most of the dentists who used cocaine in 1922 to 1923 reported that they had since discontinued its use in favor of the synthetic local anesthetics. In the case of exempt preparations (paregoric), it is thought that, although they were sold only in small amounts (in quantities not exceeding 2 fluid ounces), they were dispensed too frequently in some cases to the same individuals. It is also realized that some of the residents of the county may have purchased narcotics outside of the county (in near-by counties for instance); but it is thought that any error in the total amounts resulting from this cause would be counterbalanced by that introduced through the purchases made within the county by non-residents.

Acknowledgments.—It is desired here to thank the officials of the Maryland State board of health for their cooperation in making this survey, and especially for the loan of one of their drug inspectors, Mr. Henry Bernhardt, who assisted in the work throughout.

SMALLPOX AND VACCINATION.

In view of the increasing neglect of vaccination in certain parts of the United States, as evidenced by an increase in the number of smallpox cases and deaths occurring in those sections, and because of the approach of the time of year of increased seasonal prevalence of smallpox, it is deemed advisable to publish a letter sent to the health officers of the several States under date of July 8, 1924:

The text of the letter is as follows:

To all State Health Officers:

The neglect of vaccination in many districts of certain sections of the United States has led to a recrudescence of smallpox, with the corresponding suffering experienced by its victims and a wholly unnecessary sacrifice of human lives in the years 1922 and 1923, amounting to 967 known deaths from smallpox and possibly a number of others which were not reported.

During the first six months of 1924 an additional toll of at least 200 human lives has been taken, every one of which deaths could have been prevented by vaccination and revaccination.

The increasing number of cases of smallpox and the continued spread of this disease from city to city and from State to State will, if not checked, not only augment the number of victims but may bring about a condition which would seriously interfere with the movements of passengers on trains, steamers, automobiles, and other carriers. It is conceivable that this interference might be of a degree that would involve the expenditure of hundreds of thousands of dollars in quarantine, a contingency which might easily be avoided provided our people can be induced to protect themselves by vaccination and revaccination.

The Public Health Service is being importuned at the present time to exercise its authority in enforcing interstate quarantine to prevent the migration of the unvaccinated when there is danger that these persons may have been exposed to smallpox.

It is particularly desirable that the Federal Government may not be forced to interfere in interstate travel, and it is earnestly hoped that the authorities of all States, counties, municipalities, or other units of government will immediately begin campaigns to secure the vaccination or revaccination of all persons who have not been recently successfully vaccinated, particularly in those States where smallpox is prevalent.

Vaccination and revaccination being a perfect protection against smallpox, it might be argued that protection against the disease is a matter which should be left to the discretion of the individual, but there is no more reason for leaving the defense against an enemy of the State, such as smallpox is, to the discretion of the individual, than there would be in leaving the defense of the State against an armed invading force, to the individual. These enemies are equally dangerous. Furthermore, there are a large number of persons who are otherwise good citizens, who, because of indifference, carelessness, and lack of information, and oftentimes because of having been deceived by false propaganda and deliberate misinformation, either fail or refuse to protect themselves and their trusting but helpless children until it is too late. These same children of misinformed or irresponsible parents, being too young to judge for themselves, are entitled to the protection of the State, and certainly the State is derelict in its duties if it allows such unprotected children to be exposed to smallpox.

Respectfully,

H. S. CUMMING,
Surgeon General.

The response to the foregoing letter has been very gratifying. At the same time, much still remains to be done in the way of vaccination and revaccination of our nonimmune population if a recrudescence of this disease is to be forestalled.

CURRENT COURT DECISIONS PERTAINING TO PUBLIC HEALTH.

Formation of local health districts upheld.—The organization, under the provisions of chapter 571 of the 1917 session laws of California, of a local health district with boundaries identical with those of a county, has been upheld by the Supreme Court of California. The court held that the legislature had power to provide, as it did, for the organization of such local health districts, and that the particular act in question was constitutional. For an abstract of the same case in the lower court, see Public Health Reports, September 21, 1923, page 2212. (*Stuckenbruck v. Board of Supervisors of San Joaquin County et al.*, 225 Pac. 857.)

Ordinance requiring removal of privies and installation of water-closets upheld.—It has been held by the Supreme Court of Missouri, Division No. 1, that an ordinance of the city of St. Louis, providing for the removal of privy vaults and the substitution of water-closets where possible in the city, is within the charter power of the city, and that such requirement is a proper and constitutional exercise of the police power delegated by the State to municipal corporations. It was also held that a municipality may lawfully require a property owner to alter or reconstruct an existing building without compensation where such alteration or reconstruction is reasonably necessary to protect the public health. (*City of St. Louis v. Nash*, 260 S. W. 985.)

Ordinance relating to the slaughtering of animals and the inspection and sale of meat upheld.—The Supreme Court of South Carolina has held that a city has the power to pass an ordinance which not only requires the inspection of meat, but imposes conditions upon the operation of an abattoir, outside of the city limits, in which the meat intended for sale within the city is prepared, and has also held that a particular ordinance, such as the foregoing, passed by the city of Sumter is valid. (*Ex parte Boyle*; *City of Sumter v. Boyle*; 123 S. E. 9.)

DEATHS DURING WEEK ENDED AUGUST 30, 1924.

Summary of information received by telegraph from industrial insurance companies for week ended August 30, 1924, and corresponding week of 1923. (From the Weekly Health Index, September 3, 1924, issued by the Bureau of the Census, Department of Commerce.)

	Week ended August 30, 1924.	Corresponding week, 1923.
Policies in force.....	54, 263, 831	53, 264, 053
Number of death claims.....	8, 439	8, 043
Death claims per 1,000 policies in force, annual rate.....	8. 1	7. 9

Deaths from all causes in certain large cities of the United States during the week ended August 30, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923. (From the Weekly Health Index, September 3, 1924, issued by the Bureau of the Census, Department of Commerce.)

City.	Week ended Aug. 30, 1924.		Annual death rate per 1,000 corresponding week, 1923.	Deaths under 1 year.		Infant mortality rate, week ended Aug. 30, 1924. ¹
	Total deaths.	Death rate. ¹		Week ended Aug. 30, 1924.	Corresponding week, 1923.	
Total (62 cities)	5,537	10.8	² 10.6	526	³ 794	-----
Akron.....	18	-----	-----	5	6	53
Albany.....	28	12.3	10.4	6	4	137
Atlanta.....	75	17.2	14.7	9	10	-----
Baltimore.....	174	11.6	11.4	26	23	77
Birmingham.....	49	12.7	13.6	4	11	-----
Boston.....	200	13.4	12.0	40	26	111
Bridgeport.....	11	-----	-----	1	2	16
Buffalo.....	136	13.0	11.3	26	28	110
Cambridge.....	19	8.9	8.9	3	2	52
Camden.....	19	7.8	11.3	4	6	66
Chicago.....	529	9.4	9.1	73	79	68
Cincinnati.....	114	14.6	13.3	18	23	113
Cleveland.....	166	9.5	9.5	23	20	58
Columbus.....	78	15.2	13.4	7	7	66
Dallas.....	39	10.8	10.3	6	10	-----
Dayton.....	44	13.6	10.7	7	6	117
Denver.....	80	-----	-----	12	10	-----
Des Moines.....	30	10.8	13.0	3	1	-----
Detroit.....	244	-----	-----	46	43	86
Duluth.....	25	12.0	6.9	3	3	65
Erie.....	24	-----	-----	0	3	0
Fall River.....	24	10.3	12.1	4	10	56
Flint.....	12	-----	-----	2	9	35
Fort Worth.....	24	8.4	9.8	6	1	-----
Grand Rapids.....	21	7.4	8.9	1	4	16
Houston.....	37	-----	-----	6	2	-----
Indianapolis.....	106	15.8	13.1	18	19	132
Jacksonville, Fla.....	41	20.9	18.2	6	9	-----
Jersey City.....	43	7.2	12.0	7	13	50
Kansas City, Kans.....	26	11.5	10.4	2	3	39
Kansas City, Mo.....	82	11.9	10.4	8	13	-----
Los Angeles.....	169	-----	-----	18	25	56
Louisville.....	61	12.3	14.2	10	12	93
Lowell.....	26	11.7	12.7	10	5	178
Lynn.....	20	10.1	9.1	3	2	76
Memphis.....	64	19.4	18.4	10	9	-----
Milwaukee.....	70	7.4	7.9	9	10	43
Minneapolis.....	70	8.7	8.3	5	4	27
Nashville.....	48	20.3	19.6	9	3	-----
New Bedford.....	22	8.7	11.2	7	9	109
New Haven.....	25	7.4	7.2	3	4	40
New Orleans.....	130	16.6	16.9	19	14	-----
New York.....	1,106	9.6	9.6	171	150	69
Bronx Borough.....	113	6.8	7.8	13	13	46
Brooklyn Borough.....	385	9.1	8.0	68	55	72
Manhattan Borough.....	477	11.0	12.1	70	80	71
Queens Borough.....	84	7.9	8.6	12	11	60
Richmond Borough.....	47	18.8	8.2	8	0	146
Newark, N. J.....	69	8.1	9.5	11	17	52
Norfolk.....	29	9.2	10.5	4	4	72
Oakland.....	52	11.0	7.2	6	3	-----
Oklahoma City.....	17	8.5	-----	3	-----	-----
Omaha.....	53	13.3	9.7	5	5	54
Paterson.....	40	14.8	11.6	6	1	102
Philadelphia.....	405	10.9	10.0	60	52	77
Pittsburgh.....	147	12.2	11.3	29	25	98
Portland, Oreg.....	42	7.9	11.2	3	5	31
Providence.....	48	10.3	12.8	5	14	41
Richmond.....	32	9.1	10.4	0	7	0
Rochester.....	66	10.6	-----	14	-----	110
St. Louis.....	189	12.1	11.6	30	24	-----
St. Paul.....	57	12.2	11.0	5	7	43
Salt Lake City.....	33	13.4	9.1	4	1	80
San Antonio.....	55	15.0	10.2	11	7	-----

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1923. Cities left blank are not in the registration area for births.

³ Data for 60 cities.

⁴ Deaths for week ended Friday, Aug. 29, 1924.

Deaths from all causes in certain large cities of the United States during the week ended August 30, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923. (From the Weekly Health Index, September 3, 1924, issued by the Bureau of the Census, Department of Commerce)—Continued.

City.	Week ended Aug. 30, 1924.		Annual death rate per 1,000 corresponding week, 1923.	Deaths under 1 year.		Infant mortality rate, week ended Aug. 30, 1924.
	Total deaths.	Death rate.		Week ended Aug. 30, 1924.	Corresponding week, 1923.	
San Francisco.....	123	11.7	12.9	16	10	97
Seattle.....	45			1	4	10
Somerville.....	13	6.7	8.4	2	0	54
Spokane.....	29			2	0	44
Springfield, Mass.....	28	9.8	9.4	4	8	68
Syracuse.....	38	10.5	12.2	2	4	25
Tacoma.....	17	8.6	9.7	0	0	0
Toledo.....	41	7.7	11.6	8	10	75
Trenton.....	40	16.1	15.6	8	6	133
Utica.....	20	9.9	6.6	2	3	44
Washington, D. C.....	107	11.5	11.8	16	9	93
Waterbury.....	12			4	1	93
Wilmington, Del.....	20	8.7	12.8	2	8	45
Yonkers.....	21	10.0	3.4	4	2	87

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT WEEKLY STATE REPORTS.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

Reports for Week Ended September 6, 1924.

ALABAMA.		COLORADO.	
	Cases.	(Exclusive of Denver.)	Cases.
Cerebrospinal meningitis.....	1	Chicken pox.....	5
Chicken pox.....	3	Diphtheria.....	11
Dengue.....	1	Malaria.....	2
Diphtheria.....	23	Mumps.....	4
Dysentery.....	27	Pneumonia.....	1
Influenza.....	15	Scarlet fever.....	8
Lethargic encephalitis.....	1	Trachoma.....	1
Malaria.....	170	Tuberculosis.....	121
Measles.....	11	Typhoid fever.....	10
Mumps.....	16	Whooping cough.....	13
Pellagra.....	4		
Pneumonia.....	15		
Scarlet fever.....	9		
Smallpox.....	22		
Tetanus.....	1		
Tuberculosis.....	29		
Typhoid fever.....	83		
Whooping cough.....	9		
ARIZONA.		CONNECTICUT.	
Chicken pox.....	1	Cerebrospinal meningitis.....	1
Diphtheria.....	2	Chicken pox.....	5
Pneumonia.....	1	Conjunctivitis.....	1
Scarlet fever.....	1	Diphtheria.....	15
Typhoid fever.....	8	Dysentery (bacillary).....	4
		Influenza.....	1
		Lethargic encephalitis.....	1
		Malaria.....	3
		Measles.....	2
		Mumps.....	5
		Pneumonia (lobar).....	6
		Poliomyelitis.....	8
		Scarlet fever.....	18
		Trachoma.....	2
		Tuberculosis (all forms).....	36
		Typhoid fever.....	6
		Whooping cough.....	40
ARKANSAS.		DELAWARE.	
Chicken pox.....	3	Cerebrospinal meningitis.....	1
Diphtheria.....	6	Diphtheria.....	1
Malaria.....	100	Influenza.....	1
Measles.....	1	Mumps.....	1
Mumps.....	1		
Paratyphoid fever.....	1		
Pellagra.....	5		
Tuberculosis.....	4		
Typhoid fever.....	30		
Whooping cough.....	4		

DELAWARE—continued.		IOWA.	
	Cases.		Cases.
Pneumonia.....	2	Diphtheria.....	7
Typhoid fever.....	5	Scarlet fever.....	14
Whooping cough.....	4	Smallpox.....	7
		Typhoid fever.....	3
FLORIDA.		KANSAS.	
Diphtheria.....	6	Chicken pox.....	5
Influenza.....	2	Diphtheria.....	17
Malaria.....	18	Dysentery (bacillary).....	1
Typhoid fever.....	14	Influenza.....	3
		Malaria.....	2
GEORGIA.		Measles.....	2
Diphtheria.....	11	Mumps.....	30
Dysentery (bacillary).....	1	Pneumonia.....	3
Hookworm disease.....	1	Scarlet fever.....	21
Malaria.....	22	Smallpox.....	3
Measles.....	1	Tetanus.....	1
Mumps.....	2	Tuberculosis.....	66
Pellagra.....	1	Typhoid fever.....	21
Pneumonia.....	9	Whooping cough.....	31
Scarlet fever.....	5		
Septic sore throat.....	1	LOUISIANA.	
Smallpox.....	1	Diphtheria.....	4
Tetanus.....	1	Hookworm disease.....	4
Tuberculosis (pulmonary).....	7	Malaria.....	15
Typhoid fever.....	25	Pneumonia.....	14
Whooping cough.....	1	Scarlet fever.....	1
		Smallpox.....	2
ILLINOIS.		Tuberculosis.....	40
Diphtheria:		Typhoid fever.....	16
Cook County.....	43	Whooping cough.....	4
Scattering.....	21		
Influenza.....	3	MAINE.	
Lethargic encephalitis—Cook County.....	2	Cerebrospinal meningitis.....	1
Measles.....	12	Diphtheria.....	7
Pneumonia.....	66	Measles.....	1
Polioomyelitis:		Mumps.....	6
Cook County.....	5	Paratyphoid fever.....	1
Douglas County.....	1	Polioomyelitis.....	16
Stephenson County.....	1	Scarlet fever.....	7
Whiteside County.....	2	Tuberculosis.....	3
Scarlet fever:		Typhoid fever.....	6
Cook County.....	33	Vincent's angina.....	1
Scattering.....	18	Whooping cough.....	7
Smallpox.....	6		
Tuberculosis.....	271	MARYLAND. ¹	
Typhoid fever.....	36	Chicken pox.....	4
Whooping cough.....	106	Diphtheria.....	22
		Dysentery.....	11
INDIANA.		German measles.....	2
Cerebrospinal meningitis.....	2	Influenza.....	9
Chicken pox.....	3	Lethargic encephalitis.....	1
Diphtheria.....	39	Malaria.....	3
Measles.....	8	Measles.....	9
Mumps.....	3	Mumps.....	2
Pneumonia.....	3	Paratyphoid fever.....	3
Polioomyelitis.....	1	Pneumonia (all forms).....	14
Scarlet fever.....	21	Polioomyelitis.....	8
Smallpox.....	15	Scarlet fever.....	9
Trachoma.....	1	Tuberculosis.....	74
Tuberculosis.....	25	Typhoid fever.....	47
Typhoid fever.....	35	Vincent's angina.....	1
Whooping cough.....	21	Whooping cough.....	33

¹ Week ended Friday.

MASSACHUSETTS.		NEW JERSEY—continued.	
	Cases.		Cases.
Cerebrospinal meningitis.....	2	Dysentery.....	1
Chicken pox.....	5	Influenza.....	2
Conjunctivitis (suppurative).....	8	Malaria.....	1
Diphtheria.....	85	Measles.....	15
German measles.....	4	Pneumonia.....	36
Influenza.....	1	Poliomyelitis.....	6
Lethargic encephalitis.....	2	Scarlet fever.....	27
Measles.....	34	Smallpox.....	5
Mumps.....	17	Typhoid fever.....	19
Ophthalmia neonatorum.....	4	Whooping cough.....	217
Pneumonia (lobar).....	18		
Poliomyelitis.....	15	NEW MEXICO.	
Scarlet fever.....	54	Diphtheria.....	8
Septic sore throat.....	3	Malaria.....	1
Tuberculosis (all forms).....	95	Measles.....	2
Typhoid fever.....	16	Mumps.....	1
Whooping cough.....	58	Paratyphoid fever.....	2
		Pellagra.....	1
MICHIGAN.		Scarlet fever.....	3
Diphtheria.....	47	Tuberculosis.....	16
Measles.....	25	Typhoid fever.....	8
Pneumonia.....	32	Whooping cough.....	2
Scarlet fever.....	114		
Smallpox.....	6	NEW YORK.	
Tuberculosis.....	34	(Exclusive of New York City.)	
Typhoid fever.....	33	Cerebrospinal meningitis.....	1
Whooping cough.....	138	Diphtheria.....	52
		Influenza.....	2
MINNESOTA.		Measles.....	29
Chicken pox.....	13	Pneumonia.....	54
Diphtheria.....	40	Poliomyelitis.....	75
Measles.....	2	Scarlet fever.....	49
Pneumonia.....	1	Smallpox.....	2
Poliomyelitis.....	9	Typhoid fever.....	23
Scarlet fever.....	50	Whooping cough.....	194
Smallpox.....	10		
Tuberculosis.....	72	NORTH CAROLINA.	
Typhoid fever.....	6	Cerebrospinal meningitis.....	1
Whooping cough.....	18	Chicken pox.....	11
		Diphtheria.....	220
MISSISSIPPI.		German measles.....	2
Diphtheria.....	28	Measles.....	19
Poliomyelitis.....	1	Scarlet fever.....	25
Scarlet fever.....	5	Septic sore throat.....	1
Smallpox.....	1	Smallpox.....	10
Typhoid fever.....	28	Typhoid fever.....	69
		Whooping cough.....	121
MISSOURI.			
Chicken pox.....	6	OREGON.	
Diphtheria.....	27	Chicken pox.....	5
Malaria.....	2	Diphtheria:	
Mumps.....	5	Portland.....	8
Poliomyelitis.....	3	Scattering.....	8
Rabies.....	4	Lethargic encephalitis.....	1
Scarlet fever.....	18	Measles.....	3
Tetanus.....	1	Mumps.....	4
Trachoma.....	2	Pneumonia.....	12
Tuberculosis.....	46	Scarlet fever.....	11
Typhoid fever.....	35	Smallpox.....	3
Whooping cough.....	24	Typhoid fever:	
		Klamath Falls.....	10
NEW JERSEY.		Scattering.....	5
Cerebrospinal meningitis.....	1	Whooping cough.....	2
Chicken pox.....	17		
Diphtheria.....	38		

¹ Deaths.

SOUTH DAKOTA.		WASHINGTON—continued.	
	Cases.		Cases.
Chicken pox.....	1	Diphtheria.....	15
Diphtheria.....	2	Measles.....	6
Measles.....	4	Mumps.....	7
Mumps.....	2	Poliomyelitis:	
Poliomyelitis.....	1	Chelan County.....	9
Scarlet fever.....	5	Seattle County.....	4
Smallpox.....	2	Skagit County.....	2
Tuberculosis.....	1	Snohomish County.....	1
Typhoid fever.....	6	Scarlet fever.....	23
Whooping cough.....	11	Smallpox.....	29
		Tuberculosis.....	17
		Typhoid fever.....	12
		Whooping cough.....	12
TEXAS.		WEST VIRGINIA.	
Chicken pox.....	38	Diphtheria.....	3
Dengue.....	38	Scarlet fever.....	5
Diphtheria.....	64	Smallpox.....	1
Dysentery.....	101	Typhoid fever.....	14
Influenza.....	140		
Leprosy.....	2	WISCONSIN.	
Lethargic encephalitis.....	3		
Malta fever.....	20	Milwaukee:	
Measles.....	74	Cerebrospinal meningitis.....	1
Mumps.....	88	Chicken pox.....	6
Ophthalmia neonatorum.....	5	Diphtheria.....	2
Paratyphoid fever.....	39	Measles.....	3
Pellagra.....	82	Scarlet fever.....	1
Pneumonia.....	31	Whooping cough.....	29
Poliomyelitis.....	3	Scattering:	
Rabies in man.....	4	Cerebrospinal meningitis.....	1
Scarlet fever.....	41	Chicken pox.....	9
Smallpox.....	5	Diphtheria.....	13
Tetanus.....	5	German measles.....	2
Trachoma.....	19	Influenza.....	4
Tuberculosis.....	194	Measles.....	2
Typhoid fever.....	143	Pneumonia.....	1
Typhus fever.....	7	Poliomyelitis.....	5
Whooping cough.....	140	Scarlet fever.....	37
		Smallpox.....	10
		Tuberculosis.....	18
		Typhoid fever.....	4
		Whooping cough.....	120
VERMONT.		WYOMING.	
Chicken pox.....	1	Chicken pox.....	1
Diphtheria.....	2	Measles.....	1
Measles.....	1	Mumps.....	1
Mumps.....	1	Scarlet fever.....	3
Scarlet fever.....	2	Typhoid fever.....	1
Typhoid fever.....	1		
Whooping cough.....	4		
WASHINGTON.			
Cerebrospinal meningitis—Pierce County.....	1		
Chicken pox.....	13		

Reports for Week Ended August 30, 1924.

DISTRICT OF COLUMBIA.		NORTH DAKOTA.	
	Cases.		Cases.
Chicken pox.....	2	Diphtheria.....	1
Diphtheria.....	2	Scarlet fever.....	11
Scarlet fever.....	7	Trachoma.....	1
Tuberculosis.....	22	Tuberculosis.....	3
Typhoid fever.....	4	Whooping cough.....	2
Whooping cough.....	11		

SUMMARY OF MONTHLY REPORTS FROM STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebro-spinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Polio-myelitis.	Scarlet fever.	Smallpox.	Typhoid fever
July, 1924.										
Iowa.....	2	47	-----	-----	41	-----	-----	45	22	40
Maine.....	1	30	1	-----	-----	-----	-----	50	2	63

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES.

Diphtheria.—For the week ended August 23, 1924, 35 States reported 965 cases of diphtheria. For the week ended August 25, 1923, the same States reported 1,228 cases of this disease. Ninety-seven cities, situated in all parts of the country and having an aggregate population of more than 28,200,000, reported 490 cases of diphtheria for the week ended August 23, 1924. Last year for the corresponding week they reported 577 cases. The estimated expectancy for these cities was 600 cases. The estimated expectancy was based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty States reported 433 cases of measles for the week this year and 1,018 cases for the week last year. Ninety-seven cities reported 133 cases of measles for the week this year and 265 cases last year.

Scarlet fever.—Scarlet fever was reported for the week as follows: Thirty-five States—this year, 726 cases; last year, 781 cases. Ninety-seven cities—this year, 284 cases; last year, 265 cases; estimated expectancy, 248 cases.

Smallpox.—For the week ended August 23, 1924, 35 States reported 191 cases of smallpox. Last year for the corresponding week they reported 112 cases. Ninety-seven cities reported smallpox for the week as follows: 1924, 70 cases; 1923, 22 cases; estimated expectancy, 26 cases. The cities reported 7 deaths from smallpox for the week ended August 23, 1924.

Typhoid fever.—Seven hundred and sixty-eight cases of typhoid fever were reported for the week ended August 23, 1924, by 34 States. For the corresponding week of 1923 the number was 876 cases. Ninety-seven cities reported 233 cases of typhoid fever for the week this year and 216 cases of this disease for the corresponding week last year. The estimated expectancy for these cities was 231 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia (combined) were reported for the week by 97 cities as follows: 1924, 253 deaths; 1923, 290 deaths.

City reports for week ended August 23, 1924.

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1915 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city.	Chick- en pox, cases re- ported	Diphtheria.		Influenza.		Meas- les, cases re- ported.	Mumps, cases re- ported.	Pneu- monia, deaths re- ported.	Scarlet fever.		
		Cases, esti- mated expect- ancy.	Cases re- ported.	Cases re- ported.	Deaths re- ported.				Cases, esti- mated expect- ancy.	Cases re- ported.	
NEW ENGLAND.											
Maine:											
Lewiston.....	0	1	0	0	0	0	0	0	1	0	
Portland.....	0	1	0	0	0	0	2	2	1	0	
New Hampshire:											
Concord.....	0	0	0	0	0	0	0	0	0	0	
Vermont:											
Barre.....	0	1	0	0	0	0	0	0	1	0	
Massachusetts:											
Boston.....	1	34	28	0	0	18	2	4	12	13	
Fall River.....	0	2	1	0	0	1	0	0	1	1	
Springfield.....	1	2	1	0	0	1	1	0	1	0	
Worcester.....		3	4	0	0	0		1	2	5	
Rhode Island:											
Pawtucket.....	0	1	0	0	0	0	0	1	0	0	
Providence.....	0	5	4	0	0	0	0	2	2	3	
Connecticut:											
Bridgeport.....	0	4	4	0	0	1	0	0	1	4	
Hartford.....	0	4	4	0	0	0	0	0	1	0	
New Haven.....	0	2	2	0	0	2	0	2	1	2	
MIDDLE ATLANTIC.											
New York:											
Buffalo.....	0	13	5	0	0	0	0	5	5	4	
New York.....	20	96	108	5	1	21	12	63	22	19	
Rochester.....		4	3	0	0	1		2	3	3	
Syracuse.....	1	5	2	0	0	3	0	1	3	2	
New Jersey:											
Camden.....	1	1	0	0	0	1	0	0	1	2	
Newark.....	2	7	8	1	0	11	3	4	3	4	
Trenton.....	4	3	0	0	0	0	0	2	1	0	
Pennsylvania:											
Philadelphia.....	10	33	47			8	8	14	16	8	
Pittsburgh.....	12	20	12			1	2	11	6	13	
Reading.....	1	2	4			0	2	0	0	0	
EAST NORTH CENTRAL.											
Ohio:											
Cincinnati.....	2	7	1	0	0	4	1	3	3	2	
Cleveland.....	10	20	13	0	0	12	5	3	9	9	
Columbus.....	0	2	1	0	0	1	0	1	2	1	
Toledo.....	3	5	6	0	1	3	0	0	5	2	
Indiana:											
Fort Wayne.....		1	0	0	0	0			0	2	
Indianapolis.....		8	2	0	0	1		3	2	1	
South Bend.....	0	1	1	0	0	0	0	0	1	1	
Terre Haute.....	0	1	2	0	0	0	0	2	0	2	
Illinois:											
Chicago.....	11	68	35	1	1	10	5	17	27	19	
Cicero.....	0	2	0	0	0	0	0	0	0	0	
Springfield.....		1	0	0	0	0		0	1	0	
Michigan:											
Detroit.....	5	36	20	1	0	4	2	12	21	15	
Flint.....	1	5	3	0	0	0	0	1	2	11	
Grand Rapids.....	0	2	1	0	0	0	2	0	1	2	
Saginaw.....	0	1	0	0	0	0	0	0	1	0	

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Chick- en pox, cases re- ported	Diphtheria.		Influenza.		Meas- les, cases re- ported.	Mumps, cases re- ported.	Pneu- monia, deaths re- ported.	Scarlet fever.		
		Cases, esti- mated expect- ancy.	Cases re- ported.	Cases re- ported.	Deaths re- ported.				Cases, esti- mated expect- ancy.	Cases re- ported.	
EAST NORTH CENTRAL—continued.											
Wisconsin:											
Madison.....	0	0	2	1	1	1	4	0	0	4	
Milwaukee.....	8	12	6	0	0	4	2	6	10	5	
Racine.....	1	1	1	0	0	0			1	0	
Superior.....	0	1	0	0	0	0		0	1	0	
WEST NORTH CENTRAL.											
Minnesota:											
Duluth.....		3			0			2	3		
Minneapolis....	4	12	8	0	0	0	0	0	6	16	
St. Paul.....		11	12	0	0	0		5	3	8	
Iowa:											
Sioux City.....	2	0	0	0		0	0		1	0	
Waterloo.....	0	0	0	0		0	0		1	0	
Missouri:											
Kansas City....	0	4	2	0	0	1	1	4	2	7	
St. Joseph.....	0	1	0	0	0	0	0	0	1	0	
St. Louis.....	4	25	20	0	0	2	4		6	42	
North Dakota:											
Fargo.....	0	0	0	0	0	0	0	0	1	0	
Grand Forks....	1	0	0	0		0	0		1	0	
South Dakota:											
Sioux Falls.....	0	1	0	0	0	0	0	0	0	0	
Nebraska:											
Lincoln.....	0	0	1	0	0	0	0	0	1	0	
Omaha.....	0	6	7	0	0	1	0	1	1	1	
Kansas:											
Topeka.....	0	1	0	0	0	0	5	0	2	1	
Wichita.....	0	1	0	0	0	0	0	1	1	0	
SOUTH ATLANTIC.											
Delaware:											
Wilmington....	0	1	0	0	0	0	0	0	1	0	
Maryland:											
Baltimore.....	0	11	8	1	1	8	1	15	6	4	
Cumberland.....		1	0	0	0	0		0	1	0	
Frederick.....		1	1		1	0		0	0	0	
District of Colum- bia:											
Washington....	0	3	8	0	0	1	0	4	3	7	
Virginia:											
Lynchburg.....	0	* 1	1	0	0	0	4	1	0	0	
Norfolk.....	0	1	0	0	0	1	1		1	0	
Richmond.....	0	5	6	0	0	0	0	3	3	1	
Roanoke.....	0	2	2	0	0	0	0	0	1	1	
West Virginia:											
Charleston.....	2	2	0	0	0	0	0	0	1	0	
Huntington.....	0	1	0	0	0	0	0	0	1	0	
Wheeling.....	1	1	1	0	0	0	0	1	1	0	
North Carolina:											
Raleigh.....		1	0			0		1	0	0	
Wilmington....		1	0	0	0	0		1	0	0	
Winston-Salem...	0	1	7	0	0	0	0	1	0	1	
South Carolina:											
Charleston.....	0	1	0	0	0	0	0	1	1	1	
Columbia.....	0	1	0	0	0	0	0	2	0	1	
Greenville.....	0	1	0	0	0	0	0	0	0	0	
Georgia:											
Atlanta.....	0	3	4	0	0	0	0	8	4	6	
Brunswick.....	0	0	0	0	0	0	0	0	0	0	
Savannah.....	0	1	0	0	0	0	2	0	1	0	
Florida:											
St. Petersburg..	0	0	0	0	1	0	0	0	0	0	
Tampa.....	0	1	1	0	0	0	0	0	1	0	

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Chick- en pox, cases re- ported	Diphtheria.		Influenza.		Meas- les, cases re- ported.	Mumps, cases re- ported.	Pneu- monia, deaths re- ported.	Scarlet fever.		
		Cases, esti- mated expect- ancy.	Cases re- ported.	Cases re- ported.	Deaths re- ported.				Cases, esti- mated expect- ancy.	Cases re- ported.	
EAST SOUTH CEN- TRAL.											
Kentucky:											
Covington.....	0	1	0	0	0	0	0	0	0	0	0
Louisville.....	2	4	3	0	0	1	1	0	1	2	2
Tennessee:											
Memphis.....		6	2	0	0	0		2	2	1	1
Nashville.....		1	0	0	0	4		3	2	0	0
Alabama:											
Birmingham....	3	4	4	1	0	0	3	0	3	10	10
Mobile.....	0	1	0	0	0	0	0	0	0	0	0
Montgomery....	0	1	0	0	0	0	4	0	0	0	0
WEST SOUTH CEN- TRAL.											
Arkansas:											
Fort Smith.....	0	0	0	0		0	0		1	4	4
Little Rock.....	0	1	0	0	0	1	1	1	0	0	0
Louisiana:											
New Orleans....	0	8	4		1	0	0	4	1	0	0
Shreveport.....	0		1	0	0	0	0	3		0	0
Oklahoma:											
Oklahoma.....	1	2	0	0	0	0	0	1	2	0	0
Tulsa.....	0	1	0	0		0	0		1	0	0
Texas:											
Dallas.....	0	3	4	0	0	0	0	1	1	0	0
Galveston.....	0	0	2	0	0	0	0	0	0	0	0
Houston.....		2	2	0	0	0		1	1	1	1
San Antonio....	0	1	2	0	0	0	0	0	1	0	0
MOUNTAIN.											
Montana:											
Billings.....	0	0	0	0	0	0	3	1	0	0	0
Great Falls....	0	1	1	0	0	1	0	0	0	0	0
Helena.....	0	0	0	0	0	0	0	0	0	0	0
Missoula.....	0	0	0	0	0	0	0	0	0	0	0
Idaho:											
Boise.....	1	1	1	0	0	0	0	0	1	0	0
Colorado:											
Denver.....	0	7	8	0	0	0	1	7	2	2	2
Pueblo.....	1	3	2	0	0	0	0	1	0	2	2
New Mexico:											
Albuquerque....		0	1	0	0	0		0	1	0	0
Utah:											
Salt Lake City..	2	3	3	0	0	1	1	2	2	0	0
Nevada:											
Reno.....	0	0	0	0	0	0	0	0	1	0	0
PACIFIC.											
Washington:											
Seattle.....	8	2	5			0	0		2	4	4
Spokane.....	0	2	0			0	0		2	2	2
Tacoma.....		1							1		
Oregon:											
Portland.....	1	2	12	0	0	0	0	3	2	3	3
California:											
Los Angeles....	2	17	17	0	0	6	4	11	5	5	5
Sacramento....	0	2	3	0	0	0	0	1	1	1	1
San Francisco..	4	15	18	1	0	3	7	1	6	4	4

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Popula- tion July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths re- ported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
NEW ENGLAND.										
Maine:										
Lewiston.....	33,790	0	0	0	0	1	0	0	0	3
Portland.....	73,129	0	0	0	0	2	2	0	0	17
New Hampshire:										
Concord.....	22,408	0	0	0	1	1	0	0	0	5
Vermont:										
Barre.....	10,008	0	0	0	0	0	0	0	0	2
Massachusetts:										
Boston.....	770,400	0	0	0	14	5	1	0	11	166
Fall River.....	120,912	0	0	0	3	1	0	0	3	28
Springfield.....	144,227	0	0	0	0	1	0	0	2	27
Worcester.....	191,927	0	0	0	2	1	0	0		
Rhode Island:										
Pawtucket.....	68,799	0	0	0	1	1	0	0	0	13
Providence.....	242,378	0	0	0	7	2	1	0	1	58
Connecticut:										
Bridgeport.....	143,555	0	0	0	2	0	1	0	6	26
Hartford.....	138,036	0	0	0	0	2	0	0	1	24
New Haven.....	172,967	0	0	0	1	3	3	0	6	38
MIDDLE ATLANTIC.										
New York:										
Buffalo.....	536,718	0	0	0	3	3	3	0	17	109
New York.....	5,927,625	0	0	0	105	43	46	5	224	1,074
Rochester.....	317,867	0	0	0	6	1	0	0		52
Syracuse.....	184,511	0	0	0	0	0	0	0	4	39
New Jersey:										
Camden.....	124,157	0	1	2	2	2	1	1	0	28
Newark.....	438,696	0	0	0	6	3	0	0	90	71
Trenton.....	127,390	0	1	0	3	2	0	0	4	38
Pennsylvania:										
Philadelphia.....	1,922,788	0	0	0	35	16	12	1	72	339
Pittsburgh.....	613,442	0	1	0	4	4	2	1	12	130
Reading.....	110,917	0	0	0	1	1	1	0	11	30
EAST NORTH CENTRAL.										
Ohio:										
Cincinnati.....	406,312	0	1	0	12	3	2	1	4	109
Cleveland.....	888,519	1	3	0	15	5	4	0	30	138
Columbus.....	261,082	0	0	0	6	1	1	0	4	49
Toledo.....	268,338	1	3	4	4	3	0	0	23	47
Indiana:										
Fort Wayne.....	93,573	0	0	0	0	1	1	0		15
Indianapolis.....	342,718	0	3	0	4	3	1	0		92
South Bend.....	76,700	0	0	0	0	1	0	0	0	11
Terre Haute.....	68,939	0	0	0	1	0	0	0	0	16
Illinois:										
Chicago.....	2,886,121	0	0	0	41	6	9	0	106	498
Cicero.....	55,968	0	0	0	0	0	0	0	6	3
Springfield.....	61,833	0	0			1	0			16
Michigan:										
Detroit.....	905,668	2	4	1	22	5	2	0	78	225
Flint.....	117,908	1	3	0	0	3	0	0	1	22
Grand Rapids.....	145,947	0	0	0	3	1	2	0	2	24
Saginaw.....	69,754	0	0	0		1	1	0	3	12
Wisconsin:										
Madison.....	42,519	0	0	0	0	0	0	1	6	7
Milwaukee.....	484,595	1	1	0	0	1	0	0	46	78
Racine.....	64,393	0	1	0	0	0	0	0	0	8
Superior.....	39,671	1	4	0	0	0	0	0	0	4
WEST NORTH CENTRAL.										
Minnesota:										
Duluth.....	106,280	1		0	1	0		0		11
Minneapolis.....	409,125	2	1	0	6	1	0	0	0	62
St. Paul.....	241,891	1	3	0	2	0	0	0		57
Iowa:										
Sioux City.....	79,662	1	1			0	0		0	
Waterloo.....	39,667	0	0			0	0		2	

¹ Population Jan. 1, 1920.

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Popula- tion July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths re- ported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
WEST NORTH CENTRAL—contd.										
Missouri:										
Kansas City.....	351,819	0	0	0	0	3	4	1	7	92
St. Joseph.....	78,232	1	0	0	1	0	0	0	0	26
St. Louis.....	803,853	0	0	0	13	8	11	2	7	200
North Dakota:										
Fargo.....	24,841	0	0	0	1	0	0	0	0	5
Grand Forks.....	14,517	0	0			0	0		0	
South Dakota:										
Sioux Falls.....	29,206	0	0	0	0	0	0	0	0	3
Nebraska:										
Lincoln.....	58,761	0	0	0	0	1	0	0	0	9
Omaha.....	204,382	1	0	0		0	0	0	1	39
Kansas:										
Topeka.....	52,555	0	0	0		1	1	0	8	9
Wichita.....	79,261	1	0	0	3	2	1	0	3	20
SOUTH ATLANTIC.										
Delaware:										
Wilmington.....	117,728	0	0	0		1	3	0		20
Maryland:										
Baltimore.....	773,580	0	0	0	13	11	5	0	59	186
Cumberland.....	32,361	0	0	0	0	0	0	0	0	8
Frederick.....	11,301	0	0	0	0	1	0	0		3
District of Columbia:										
Washington.....	1437,571	0	0	0	7	5	1	0	7	88
Virginia:										
Lynchburg.....	30,277	0	0	0	0	1	2	0	0	7
Norfolk.....	159,089	0	0	0	3	2	2	0	1	
Richmond.....	181,044	0	0	0	1	3	4	0	3	35
Roanoke.....	55,502	0	0	0	0	3	2	3	2	18
West Virginia:										
Charleston.....	45,597	0	0	0	1	2	0	0	1	15
Huntington.....	57,918	0	0	0	0	1	0	0	0	
Wheeling.....	156,208	0	0	0	0	1	3	0	1	14
North Carolina:										
Raleigh.....	29,171	0	0	0	0	1	0	0	0	17
Wilmington.....	35,719	0	0	0	0	1	0	0	0	7
Winston-Salem.....	56,230	0	1	0	3	3	0	0	3	24
South Carolina:										
Charleston.....	71,245	0	0	0	2	2	8	1	0	24
Columbia.....	39,688	0	0	0	1	2	0	1	1	30
Greenville.....	25,789	0	3	0	0	0	0	0	0	3
Georgia:										
Atlanta.....	222,963	1	0	0	4	5	4	2	1	60
Brunswick.....	15,937	0	0	0	0	0	0	0	1	2
Savannah.....	89,448	0	0	0	1	2	0	0	3	29
Florida:										
St. Petersburg.....	24,403	0	0	0	0	0	0	0	0	8
Tampa.....	56,050	0	0	0	1	0	1	0	1	14
EAST SOUTH CENTRAL.										
Kentucky:										
Covington.....	57,877	0	0	0	2	0	1	0	0	20
Louisville.....	257,671	0	1	0	1	6	4	1	0	60
Tennessee:										
Memphis.....	170,067	0	0	0	8	3	22	1		78
Nashville.....	121,128	0	0	0	7	6	11	2		49
Alabama:										
Birmingham.....	195,901	0	13	0	5	6	9	2	5	49
Mobile.....	63,858	0	0	0	1	1	0	1	0	19
Montgomery.....	45,383	0	0	0	1	0	2	1	0	
WEST SOUTH CENTRAL.										
Arkansas:										
Fort Smith.....	30,635	0	0			0	1		1	
Little Rock.....	70,916	1	0	0	6	1	6	5	0	

1 Population Jan. 1, 1920.

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Popula- tion July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths re- ported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
WEST SOUTH CENTRAL—continued.										
Louisiana:										
New Orleans.....	404, 575	0	0	0	8	4	8	0	1	125
Shreveport.....	54, 590	0	0	0	0	0	0	0	0	34
Oklahoma:										
Oklahoma.....	101, 130	1	2	0	3	2	3	0	0	19
Tulsa.....	102, 018	0	1	0	0	3	0	0	0	0
Texas:										
Dallas.....	177, 274	0	1	0	8	4	13	0	14	45
Galveston.....	46, 877	0	0	0	0	0	1	0	1	7
Houston.....	154, 970	1	0	0	1	1	0	0	0	32
San Antonio.....	184, 727	0	0	0	5	0	0	1	0	60
MOUNTAIN.										
Montana:										
Billings.....	16, 927	1	0	0	0	0	0	1	0	15
Great Falls.....	27, 787	0	0	0	0	1	0	0	0	6
Helena.....	112, 037	0	0	0	0	0	0	0	0	0
Missoula.....	112, 668	0	0	0	1	1	0	0	0	9
Idaho:										
Boise.....	22, 806	0	2	0	0	0	0	0	0	4
Colorado:										
Denver.....	272, 031	2	0	0	12	3	1	1	13	74
Pueblo.....	43, 519	0	0	0	0	0	0	0	0	21
New Mexico:										
Albuquerque.....	16, 648	0	0	0	4	1	2	0	0	8
Utah:										
Salt Lake City.....	126, 241	2	0	0	2	1	6	0	3	27
Nevada:										
Reno.....	12, 429	0	0	0	0	1	1	0	0	2
PACIFIC.										
Washington:										
Seattle.....	1315, 685	1	0	0	0	1	2	0	6	0
Spokane.....	104, 573	1	1	0	0	0	0	0	5	0
Tacoma.....	101, 731	0	0	0	0	1	0	0	0	0
Oregon:										
Portland.....	273, 621	4	8	0	3	1	0	0	1	60
California:										
Los Angeles.....	666, 853	1	17	0	23	4	9	0	13	180
Sacramento.....	60, 950	0	3	0	3	1	0	0	0	17
San Francisco.....	539, 038	1	1	0	12	2	2	1	6	126

¹ Population Jan. 1, 1920.

City reports for week ended August 23, 1924—Continued.

Division, State, and city.	Cerebro-spinal meningitis.		Dengue.		Lethargic encephalitis.		Fellagra.		Polio-myelitis (infantile paralysis).		Typhus fever.		
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases, estimated, expectancy.	Cases.	Deaths.	Cases.	Deaths.
NEW ENGLAND.													
Maine:													
Portland.....	0	0	0	0	0	0	0	0	0	1	0	0	0
Massachusetts:													
Boston.....	2	0	0	0	1	0	1	0	1	5	1	0	0
Connecticut:													
Bridgeport.....	0	0	0	0	0	0	0	0	0	1	0	0	0
Hartford.....	0	0	0	0	0	0	0	0	0	2	0	0	0
MIDDLE ATLANTIC.													
New York:													
Buffalo.....	1	0	0	0	0	0	0	0	0	0	0	0	0
New York.....	5	2	0	0	5	3	0	0	5	8	4	0	0
Syracuse.....	0	0	0	0	0	0	0	0	0	12	0	0	0
New Jersey:													
Newark.....	0	0	0	0	0	0	0	0	0	1	0	0	0
Pennsylvania:													
Philadelphia.....	1	0	0	0	0	0	1	1	1	1	0	0	0
Pittsburgh.....	0	0	0	0	0	0	0	0	1	1	0	0	0
EAST NORTH CENTRAL.													
Ohio:													
Cleveland.....	0	0	0	0	0	0	0	0	1	1	0	0	0
Columbus.....	0	0	0	0	1	0	0	0	0	0	0	0	0
Indiana:													
Fort Wayne.....	0	0	0	0	0	0	0	0	0	2	0	0	0
Illinois:													
Chicago.....	0	0	0	0	0	0	0	0	6	2	0	0	0
Michigan:													
Detroit.....	1	1	0	0	1	0	0	0	1	23	2	0	0
Wisconsin:													
Milwaukee.....	2	2	0	0	0	0	0	0	1	0	0	0	0
WEST NORTH CENTRAL.													
Missouri:													
Kansas City.....	0	0	0	0	1	1	0	0	0	0	0	0	0
St. Louis.....	0	0	0	0	0	0	0	0	1	4	1	0	0
SOUTH ATLANTIC.													
Maryland:													
Baltimore.....	1	1	0	0	0	2	0	0	1	4	2	0	0
Cumberland.....	0	0	0	0	0	0	0	0	0	1	0	0	0
Virginia:													
Norfolk.....	2	0	0	0	0	0	0	0	0	0	0	0	0
South Carolina:													
Charleston.....	0	0	0	0	0	0	0	2	0	0	0	0	0
Columbia.....	0	0	0	0	0	0	1	3	0	0	0	0	0
Georgia:													
Savannah.....	0	0	0	0	0	0	0	1	0	0	0	0	0
Florida:													
St. Petersburg.....	0	1	1	0	0	0	0	0	0	0	0	0	0
EAST SOUTH CENTRAL.													
Kentucky:													
Louisville.....	0	0	0	0	0	1	0	0	0	0	0	0	0
Alabama:													
Birmingham.....	0	0	0	0	0	0	1	1	0	0	0	1	0
Texas:													
Dallas.....	0	0	0	0	0	0	0	0	0	1	1	0	0
Galveston.....	0	0	0	0	0	0	0	1	0	0	0	0	0
San Antonio.....	0	0	0	0	0	0	0	0	0	1	1	0	0
MOUNTAIN.													
Montana:													
Missoula.....	0	0	0	0	0	0	0	0	0	10	3	0	0
New Mexico:													
Albuquerque.....	0	0	0	0	0	0	0	0	0	1	0	0	0
PACIFIC.													
California:													
Los Angeles.....	0	0	0	0	1	0	0	0	1	0	0	1	0
San Francisco.....	0	0	0	0	1	0	0	0	0	0	0	0	0

The following table gives a summary of the reports from 105 cities for the 10-week period ended August 23, 1924. The cities included in this table are those whose reports have been published for all 10 weeks in the Public Health Reports. Eight of these cities did not report deaths. The aggregate population of the cities reporting cases was estimated at nearly 29,000,000 on July 1, 1923, which is the latest date for which estimates are available. The cities reporting deaths had more than 28,000,000 population on that date. The number of cities included in each group and the aggregate population are shown in a separate table below.

Summary of weekly reports from cities, June 15 to August 23, 1924.

DIPHTHERIA CASES.

	1924, week ended—									
	June 21.	June 28.	July 5.	July 12.	July 19.	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.
Total.....	885	891	666	693	652	560	477	538	456	494
New England.....	97	78	64	55	71	59	47	60	47	48
Middle Atlantic.....	368	387	296	301	274	222	188	197	149	189
East North Central.....	135	136	101	135	120	99	83	103	91	88
West North Central.....	65	36	50	52	36	37	40	43	38	49
South Atlantic.....	31	20	17	19	26	21	28	22	40	39
East South Central.....	4	8	1	3	2	6	3	6	7	9
West South Central.....	16	15	19	5	5	15	12	7	13	15
Mountain.....	30	30	19	36	25	14	5	10	22	14
Pacific.....	139	181	99	87	93	87	71	90	49	43

MEASLES CASES.

Total.....	2,302	1,857	1,186	987	676	528	406	253	178	136
New England.....	168	120	90	66	52	59	41	11	23	23
Middle Atlantic.....	1,051	774	535	422	283	204	160	97	65	46
East North Central.....	568	565	288	295	202	155	126	75	51	37
West North Central.....	87	63	46	29	35	22	16	11	7	4
South Atlantic.....	220	187	141	91	55	43	34	36	16	10
East South Central.....	26	19	15	15	13	6	3	2	4	5
West South Central.....	2	5	1	7	3	5	3	0	1	1
Mountain.....	33	35	22	11	7	6	7	3	1	1
Pacific.....	147	89	48	51	26	28	16	18	10	9

SCARLET FEVER CASES.

Total.....	973	713	563	561	441	340	309	360	248	291
New England.....	111	92	59	50	39	38	40	36	24	28
Middle Atlantic.....	331	226	186	144	114	90	73	85	49	55
East North Central.....	238	161	132	168	102	90	126	108	57	74
West North Central.....	128	102	68	100	93	65	65	61	61	75
South Atlantic.....	63	43	30	47	33	15	20	21	12	21
East South Central.....	6	1	1	7	7	7	2	3	10	13
West South Central.....	9	7	11	8	5	9	11	5	9	5
Mountain.....	13	12	16	4	14	5	7	12	5	4
Pacific.....	74	69	60	33	34	21	25	29	21	16

SMALLPOX CASES.

Total.....	346	239	159	169	158	108	116	106	93	74
New England.....	0	0	0	1	0	0	0	0	0	0
Middle Atlantic.....	10	16	19	16	17	9	9	7	8	3
East North Central.....	121	61	44	33	44	36	28	23	16	20
West North Central.....	34	41	23	47	33	13	18	15	28	5
South Atlantic.....	35	12	9	3	5	3	3	4	6	4
East South Central.....	65	36	23	21	18	13	16	8	13	14
West South Central.....	8	7	1	1	0	0	2	0	0	1
Mountain.....	10	9	5	6	4	2	2	1	1	2
Pacific.....	63	57	35	41	37	32	38	48	21	22

Summary of weekly reports from cities, June 15 to August 23, 1924—Continued.

TYPHOID FEVER CASES.

	1924, week ended—									
	June 21.	June 28.	July 5.	July 12.	July 19.	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.
Total.....	132	91	128	142	197	191	191	250	232	238
New England.....	8	4	2	6	7	6	4	6	15	8
Middle Atlantic.....	58	41	46	34	50	50	59	63	63	65
East North Central.....	11	11	9	20	20	17	20	30	29	22
West North Central.....	4	5	15	12	10	11	9	22	22	17
South Atlantic.....	16	10	23	25	36	25	31	44	37	35
East South Central.....	13	3	8	10	31	29	36	40	24	49
West South Central.....	8	4	8	21	26	22	17	19	26	29
Mountain.....	4	3	6	5	4	7	4	5	9	0
Pacific.....	10	10	11	9	13	15	11	21	7	13

INFLUENZA DEATHS.

Total.....	22	13	9	11	5	3	13	8	8	7
New England.....	0	1	1	0	0	1	2	0	0	0
Middle Atlantic.....	8	3	2	5	1	0	6	3	4	1
East North Central.....	2	3	2	1	1	0	0	2	2	2
West North Central.....	1	0	0	0	1	1	2	0	0	0
South Atlantic.....	5	4	3	2	1	1	1	2	0	3
East South Central.....	3	2	1	3	0	0	1	0	0	0
West South Central.....	3	0	0	0	0	0	0	1	0	1
Mountain.....	0	0	0	0	0	0	0	0	0	0
Pacific.....	0	0	0	0	1	0	1	0	2	0

PNEUMONIA DEATHS.

Total.....	521	432	358	318	307	304	292	209	271	251
New England.....	28	22	19	16	14	16	17	14	14	12
Middle Atlantic.....	214	200	167	141	127	126	131	121	115	102
East North Central.....	130	91	62	55	53	58	50	51	48	48
West North Central.....	34	11	15	22	17	13	14	9	17	13
South Atlantic.....	50	50	39	39	37	35	36	29	32	38
East South Central.....	12	15	14	9	12	15	12	10	10	5
West South Central.....	24	12	16	16	22	20	11	14	12	10
Mountain.....	9	12	8	10	4	7	4	8	7	10
Pacific.....	20	19	18	10	21	14	17	13	16	13

Number of cities included in summary of weekly reports and aggregate population of cities in each group, estimated as of July 1, 1923.

Group of cities.	Number of cities reporting cases.	Number of cities reporting deaths.	Aggregate population of cities reporting cases.	Aggregate population of cities reporting deaths.
Total.....	105	97	28,898,350	28,140,934
New England.....	12	12	2,098,746	2,098,746
Middle Atlantic.....	10	10	10,304,114	10,304,114
East North Central.....	17	17	7,032,535	7,032,535
West North Central.....	14	11	2,515,389	2,381,454
South Atlantic.....	22	22	2,566,901	2,566,901
East South Central.....	7	7	911,885	911,885
West South Central.....	8	6	1,124,564	1,023,013
Mountain.....	9	9	546,445	546,445
Pacific.....	6	3	1,797,839	1,275,841

FOREIGN AND INSULAR.

ECUADOR.

Plague—July 16–31, 1924.

During the period July 16 to 31, 1924, a case of plague was reported at Puna, Ecuador.

Plague-Infected Rats—Guayaquil.

During the period under report, 8,891 rats were reported taken at Guayaquil, of which 11 were found plague infected.

EGYPT.

Status of Plague.

Plague has been reported in Egypt as follows: Week ended July 22, 1924—cases, 8, distributed in four districts. Week ended July 29, 1924—cases, 4, distributed in two districts, with a total from January 1 to July 29, of 340 cases, as compared with 1,258 cases reported for the corresponding period of the year 1923. Total reported from January 1 to July 31, 1924—cases, 341; deaths, 170.

INDO-CHINA.

Cholera—Plague—Smallpox—January–March, 1924.

During the three-month period ended March 31, 1924, cholera, plague, and smallpox were reported in Indo-China as follows:

Cholera.—January, 1924—cases, 7; deaths, 5. Corresponding month of previous year, cases, 8; deaths, 1. February, 1924—cases, 9 (European, 1); death, 1. Corresponding month of preceding year, cases, 11 (European, 2); deaths, 7. March, 1924—cases, 11; deaths, 7. Corresponding month of preceding year, cases, 38; deaths, 19.

Plague.—January, 1924—cases, 8; deaths, 3. February, 1924—cases, 49 (European, 1); deaths, 38. Corresponding month of preceding year, cases, 127; deaths, 121. March, 1924—cases, 97; deaths, 65. Corresponding month of preceding year, cases, 156 (European, 2); deaths, 141 (European, 1).

Smallpox.—January, 1924—cases, 703 (European, 8); deaths, 212. Corresponding month of preceding year, cases, 137; deaths, 24. February, 1924—cases, 941 (European, 1); deaths, 253. Corresponding period preceding year, cases, 235; deaths, 72. March, 1924—cases, 1,414; deaths, 456. Corresponding month of preceding year, cases, 536; deaths, 126.

ITALY.**Measures Against Arrivals from Corfu, Greece.**

According to information dated August 9, 1924, vessels arriving at Italian ports from Corfu, Greece, have been declared subject to the provisions of the sanitary code against plague.

JAMAICA.**Smallpox (Reported as Alastrim).**

During the week ended August 9, 1924, 22 new cases of smallpox (reported as alastrim) were reported in the Island of Jamaica. Of this number five cases were reported for the Parish of Kingston.

MADAGASCAR.**Plague.**

Plague has been reported in the Island of Madagascar as follows: Month of June, 1924, 22 cases with 20 deaths occurring in the Province of Tananarive, including one case and one death occurring at the town of Tananarive, situated in the interior of the island. During the period June 1 to 15, 1924, two cases with two deaths were reported at Tamatave, a seaport town. The types of the disease were stated to be bubonic, pneumonic, and septicemic.

MEXICO.**Typhoid Fever—Colima City.**

Epidemic outbreak of typhoid fever at Colima City, capital of the State of Colima, Mexico, was reported under date of August 26, 1924. Colima City is situated in the interior of the State and about 60 miles distant from the port of Manzanillo.

PANAMA CANAL.**Communicable Diseases—July, 1924.**

During the month of July, 1924, communicable diseases were reported in the Panama Canal Zone, Colon, and Panama, as follows:

Disease.	Canal Zone.	Colon.	Panama.	Non-resident.	Total.
Chicken pox.....	3	5	2	-----	10
Diphtheria.....	1	-----	10	-----	11
Dysentery.....	-----	-----	1	-----	1
Hookworm disease.....	100	6	49	47	202
Malaria.....	133	4	4	60	201
Measles.....	13	8	5	-----	26
Meningitis.....	-----	-----	1	-----	1
Mumps.....	35	-----	-----	1	36
Pneumonia.....	6	7	19	-----	32
Tuberculosis.....	7	6	14	-----	27
Typhoid fever.....	-----	-----	2	-----	2
Whooping cough.....	2	1	-----	-----	3

PERU.

Mortality from Certain Diseases—Arequipa—January–June, 1924.

During the six-month period ended June 30, 1924, there were reported at Arequipa, Peru, 5 deaths from smallpox, 4 deaths from typhus fever, and 91 deaths from tuberculosis. The last death from smallpox and typhus fever occurred each in the month of May. The deaths from tuberculosis were stated to have been for the most part of hospital cases. The total number of deaths reported was 343, the greatest number occurring in January, viz, 69, and the lowest in April, viz, 38. Population, estimated, 40,000.

Plague—June–July, 1924.

Plague has been reported in Peru as follows: Month of June, 1924—four cases with one death; month of July, 1924—six cases with three deaths. The occurrence was reported in three localities. For distribution of occurrence according to locality, see page 2382.

UNION OF SOUTH AFRICA.

Plague—Orange Free State.

During the week ended July 12, 1924, two fatal plague cases were reported in the Orange Free State, Union of South Africa. The cases occurred in natives on two farms in the Smithfield district.

Plague-Infected Rodent.

During the same period a plague-infected house mouse was found in a wagon house on a farm in the Kroonstad district, Orange Free State.

Smallpox—Typhus Fever—June, 1924.

During the month of June, 1924, 34 cases of smallpox and 74 cases of typhus fever with 10 deaths were reported in the Union of South Africa. The occurrence for both diseases was among the colored population. For distribution of typhus fever occurrence according to States, see page 2383.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended September 12, 1924.¹**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
India.....	.....	.....	.....	June 22-28, 1924: Cases, 7,600; deaths, 4,132.
Do.....	.....	.....	.....	June 29-July 5, 1924: Cases, 7,826; deaths, 4,272.
Bombay.....	July 6-12.....	1	1	
Calcutta.....	July 19-26.....	17	13	
Madras.....	July 19-Aug. 2.....	11	6	
Indo-China.....	.....	.....	.....	Jan. 1-Mar. 31, 1924: Cases, 27; deaths, 13.

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended September 12, 1924—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	July 13-26.....	3	3	
Ecuador:				
Guayaquil.....				July 16-31, 1924: Rats taken, 8,891; found infected, 11. June 1-30, 1924: Cases, 4; deaths, 1. Rats taken, 15,858; found infected, 51.
Puná.....	July 16-31.....	1		
India:				
Do.....				June 22-28, 1924: Cases, 1,958; deaths, 1,665.
Bombay.....	July 6-12.....	2	1	June 29-July 5, 1924: Cases, 832; deaths, 744.
Indo-China.....				Jan. 1-Mar. 31, 1924: Cases, 154; deaths, 106.
Madagascar:				
Tananarive.....	June 1-15.....	2	2	Bubonic.
Tananarive Province.....				June 1-30, 1924: Cases, 22; deaths, 20. Bubonic, pneumonic, septicemic.
Tananarive Town.....	June 16-30.....	1	1	Pneumonic.
Peru.....				June 1-30, 1924: Cases, 4; deaths, 1.
Do.....				July 1-31, 1924: Cases, 6; deaths, 3.
Locality—				
Callao.....	June 1-30.....	1		
Do.....	July 1-31.....	2		
Huairal.....	June 1-30.....	1		
Do.....	July 1-31.....	1		
Lima.....	June 1-30.....	2	1	
Do.....	July 1-31.....	3	2	On country estate, 1 death
Union of South Africa:				
Orange Free State.....	June 6-12.....	2	2	Natives. One plague-infected house rodent found in the Kroonstad district.

SMALLPOX.

Canada:				
New Brunswick—				
Westmoreland County.....	Aug. 17-23.....	1		
India:				
Do.....				June 22-28, 1924: Cases, 2,138; deaths, 627.
Bombay.....	July 6-12.....	23	18	June 29-July 5, 1924: Cases, 1,549; deaths, 433.
Calcutta.....	July 19-26.....	13	6	
Karachi.....	July 27-Aug. 2.....	7	3	
Madras.....	July 20-Aug. 2.....	17	7	
Indo-China.....				Jan. 1-Mar. 31, 1924: Cases, 3,048; deaths, 921.
Jamaica.....				Aug. 3-9, 1924: Cases, 22 (reported as alastrim).
Kingston.....	Aug. 3-9.....	5		Reported as alastrim.
Mexico:				
Mexico City.....	Aug. 2-16.....	13		Including municipalities in Federal district.
Peru:				
Arequipa.....	Jan. 1-June 30.....		5	
Portugal:				
Oporto.....	Aug. 3-9.....	3	1	
Spain:				
Malaga.....	Aug. 10-16.....		3	
Tunis:				
Tunis.....	Aug. 5-11.....	2	2	
Union of South Africa.....				June 1-30, 1924: Cases, 34 In colored population.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended September 12, 1924—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria.....				Year 1923. Cases, 1,166, of which 27 were in the military population.
Mexico:				
Mexico City.....	Aug. 3-16.....	13		Including municipalities in Federal district.
Peru:				
Arequipa.....	Jan. 1-June 30.....		4	June 1-30, 1924: Cases, 74; deaths, 10.
Union of South Africa.....				June 1-30, 1924: Cases, 46; deaths, 6.
Cape Province.....				Outbreaks.
Do.....	July 6-12.....			June 1-30, 1924: Cases, 9; deaths, 2.
Natal.....				June 1-30, 1924: Cases, 19; deaths, 2.
Orange Free State.....				

Reports Received from June 28 to September 5, 1924.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India.....				Apr. 20-June 21, 1924: Cases, 73,435; deaths, 52,608.
Bombay.....	May 4-10.....	1		
Do.....	June 29-July 5.....	1		
Calcutta.....	May 11-June 28.....	293	259	
Do.....	June 29-July 19.....	63	58	
Madras.....	June 1-21.....	7	6	
Do.....	June 29-July 5.....	1		
Rangoon.....	May 11-June 28.....	98	76	
Do.....	June 29-July 19.....	16	15	
Indo-China:				
Saigon.....	Apr. 27-June 28.....	6	4	Including 100 square kilometers of surrounding country.
Philippine Islands.....				June 15-28, 1924: 33 cases, 22 deaths, including suspects.
Manila.....	June 22-28.....	1		June 29-July 5, 1924: 4 cases, 4 deaths.
Do.....	July 6-12.....	1	1	Suspect. Occurring in a non-resident.
Province—				
Batangas.....	July 1.....	2	2	
Bulacan.....	June 21.....	1	1	
Do.....	June 28-July 4.....	1		
Cagayan.....	Mar. 30-Apr. 5.....	1	1	
Laguna.....	May 18-24.....	1	1	
Rizal.....	July 3.....	1	1	
Siam:				
Bangkok.....	May 4-June 28.....	21	18	
Do.....	June 29-July 5.....	2		
Straits Settlements:				
Penang.....	June 1-7.....	1	1	
Singapore.....	June 15-28.....	9	6	
Do.....	June 29-July 5.....	2	1	
On vessel:				
S. S. Argalia.....		1		At Bassein, Lower Burma, India. Case in European member of crew. Case removed to hospital. Vessel left May 16, 1924, arrived June 8 at Durban, South Africa; left Durban June 10 for Trinidad and Cuba.

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to September 5, 1924—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Mostaganem.....	July 21-28.....	4		Seaport.
Argentina:				
Chaco Territory.....				April, 1924: Cases reported.
British East Africa:				
Kenya—				
Tanganyika Territory..	Feb. 24-June 7....	1	2	
Canary Islands:				
Tenerife—				
La Laguna.....	June 20.....	1		
Ceylon:				
Colombo.....	May 11-June 28....	11	7	Ten plague rodents.
Do.....	June 29-July 12....	2	1	
Chile:				
Antofagasta.....	June 1-16.....	4		
China:				
Amoy.....	June 15-28.....		4	
Do.....	June 29-July 19....		10	
Foochow.....	May 4-June 21....		25	Cases not reported.
Ecuador:				
Eloy Alfaro.....	May 16-31.....	1		
Guayaquil.....	May 16-June 15....	2		Rats taken, 14,987; found infected, 88.
Do.....	July 1-15.....			Rats taken, 8,546; found plague-infected, 20.
Posorja.....	do.....	1		
Egypt:				
City—				June 11-30, 1924: Cases, 35. July 2-15, 1924: Cases, 8. Total Jan. 1-July 15, 1924—cases, 328 (corresponding period, preceding year—cases, 1,190).
Alexandria.....	Apr. 2.....	1	1	
Port Said.....	Apr. 24-May 31....	2	1	
Suez.....	Jan. 2-June 26....	11	5	
Do.....	June 27-July 5....	2		
Province—				
Assiout.....	Apr. 1-June 18....	40	31	
Beni-Suef.....	June 21.....	3	3	
Charkieh.....	Jan. 31.....	1	1	
Fayoum.....	Feb. 18-June 19....	105	32	
Gharbia.....	Apr. 21-June 17....	2	1	
Ghirga.....	Jan. 17-May 13....	10	3	
Kalioubieh.....	Jan. 6-May 22....	10	1	
Kena.....	Apr. 9-May 17....	44	26	
Menoufieh.....	Jan. 2-June 12....	48	31	
Mina.....	Feb. 5-June 26....	39	20	
Greece:				
Kalamata.....				Reported July 15, 1924: Cases, 29; deaths, 6.
Patras.....	July 7.....	36		
Saloniki.....	July 3-4.....	2		
Hawaii Territory.....				July 15, 1924: Near Kukuiahae Island of Hawaii, one plague rat.
India.....				Apr. 20-June 21, 1924: Cases, 100,916; deaths, 82,991.
Bombay.....	May 4-June 21....	50	44	
Do.....	June 20-July 5....	1	2	
Calcutta.....	May 11-June 14....	10	10	
Karachi.....	May 18-June 21....	16	13	
Madras Presidency.....	May 18-31.....	7	2	
Rangoon.....	May 11-June 28....	77	72	
Do.....	June 29-July 19....	64	57	
Indo-China:				
Saigon.....	May 4-June 28....	10	2	Including 100 square kilometers of surrounding country.
Iraq:				
Bagdad.....	Apr. 20-June 21....	121	60	
Japan:				
Shizuoka Prefecture—				
Higashi.....				To June 20, 1924: Cases, 2; death, 1.
Java:				
East Java—				
Soerabaya.....	June 8-21.....	14	14	
Madagascar:				
Diego Suarez.....	July 4.....			Present.
Tamatave.....	June 2-8.....		2	Apr. 1-May 31, 1924: Cases, 116; deaths, 108.
Tananarive Province.....				
Tananarive Town.....	Apr. 1-May 31....	11	11	
Other localities.....	do.....	105	97	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to September 5, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Persia:				
Abadan.....	May 1-31.....	20	12	
Bander Abbas.....	do.....	11	6	
Bushire.....	do.....	1	1	Landed at quarantine.
Mohammerah.....	do.....	111	78	
Peru.....				May 1-31, 1924: Cases, 5; deaths, 5.
Lima (city).....	May 1-31.....	3	4	
Lima (country).....	do.....	1	1	
Mollendo.....	do.....	1	1	
Siam:				
Bangkok.....	May 4-June 14.....	3	3	
Syria:				
Beirut.....	Aug. 4.....			Present.
Union of South Africa.....				Apr. 27-June 7, 1924: Cases, 28; deaths, 14. Dec. 16, 1923, to May 31, 1924: Cases, 347; deaths, 208 (white, 51 cases, 26 deaths; native, 296 cases, 182 deaths.
Orange Free State.....				May 11-June 14, 1924: Cases, 19; deaths, 7. June 22-28, 1924: Plague-infected mouse found in Kroonstad District.
On vessel:				
S. S. Amboise.....	July 10.....	1		At Marseille, France; removed to quarantine station. Case occurred in an Arab fireman embarked at Aden. Vessel left Yokohama May 30 and Colombo, Ceylon, June 22, 1924.

SMALLPOX.

Bolivia:				
La Paz.....	May 1-June 30.....	10	9	
Do.....	July 1-31.....	5	3	
Brazil:				
Bahia.....	May 18-24.....	1		
Porto Alegre.....	May 18-June 28.....	1	2	
Rio de Janeiro.....	May 18-24.....	2		
Do.....	July 20-26.....	1		
British East Africa:				
Kenya—				
Mombasa.....	May 4-31.....	3		
British South Africa:				
Northern Rhodesia.....	May 6-June 30.....	74	1	Natives.
Do.....	July 1-7.....	2		Do.
Canada:				
British Columbia—				
Vancouver.....	June 15-28.....	11		
Do.....	June 29-July 26.....	18		Not including suburbs.
Victoria.....	Aug. 3-9.....	1		
Manitoba—				
Winnipeg.....	July 13-Aug. 1.....	3		
New Brunswick—				
Restigouche County.....	June 1-30.....	7		
Do.....	July 6-Aug. 16.....	19		
Ontario.....				June 1-30, 1924: Cases, 24. July 1-31: Cases, 7.
Sarnia.....	July 20-26.....	1		
Windsor.....	June 22-28.....	1		
Quebec—				
Montreal.....	June 8-14.....	1		
Ceylon:				
Colombo.....	July 6-12.....	1		
Chile:				
Antofagasta.....	June 11.....			Under treatment at lazaretto, 2 cases.
Valparaiso.....	June 1-7.....		1	This report covers the two principal districts of Valparaiso.
China:				
Amoy.....	May 11-June 28.....			Present.
Do.....	June 29-July 19.....			Do.
Antung.....	June 9-29.....	41	3	
Do.....	July 7-13.....	4		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to September 5, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China—Continued.				
Chungking.....	May 11-June 28.....	-----	-----	Present.
Do.....	May 29-July 12.....	-----	-----	Do.
Foochow.....	May 18-June 28.....	-----	-----	Do.
Do.....	July 6-12.....	-----	-----	Do.
Hongkong.....	May 4-June 28.....	30	24	
Do.....	June 29-July 12.....	3	3	
Manchuria—				
Dairen.....	May 12-June 29.....	22	7	
Do.....	June 29-July 6.....	1	1	
Harbin.....	May 13-June 23.....	2	-----	
Nanking.....	May 18-June 28.....	-----	-----	Do.
Do.....	July 6-19.....	-----	-----	Do.
Shanghai.....	May 25-31.....	-----	1	
Tientsin.....	May 4-June 28.....	11	1	British municipality.
Chosen:				
Fusan.....	May 1-31.....	1	-----	
Denmark:				
Copenhagen.....	May 18-31.....	3	1	
Egypt:				
City—				
Alexandria.....	June 4-10.....	1	-----	
Cairo.....	Feb. 19-May 20.....	100	25	
Port Said.....	June 18-24.....	1	2	
Do.....	June 25-July 8.....	3	-----	
France:				
Limoges.....	Apr. 1-May 31.....	-----	2	
Marseille.....	May 1-31.....	-----	1	
Paris.....	May 21-31.....	2	-----	
Gibraltar.....	July 21-27.....	1	-----	
Great Britain:				
England and Wales.....				May 25-June 28, 1924: Cases, 342.
Counties—				June 29-July 26, 1924: Cases,
Derby.....	May 25-June 28.....	159	-----	213.
Do.....	June 29-July 26.....	66	-----	
London.....	do.....	1	-----	
Northumberland.....	May 25-June 28.....	61	-----	
Do.....	June 29-July 26.....	39	-----	
Nottingham.....	May 25-June 28.....	29	-----	
Do.....	June 29-July 26.....	32	-----	
Yorks (North Rid- ing).....	May 25-June 28.....	54	-----	
Do.....	June 29-July 26.....	27	-----	
Yorks (West Rid- ing).....	May 25-June 28.....	5	-----	
Do.....	June 29-July 26.....	27	-----	
Greece:				
Saloniki.....	Apr. 21-May 4.....	7	2	
Haiti:				
Port au Prince.....	July 6-12.....	2	-----	Developed at Cape Haitien.
India:				Apr. 20-June 21, 1924: Cases,
Bombay.....	May 4-June 28.....	432	299	26,258; deaths, 6,126.
Do.....	June 29-July 5.....	37	25	
Calcutta.....	May 11-June 28.....	36	32	
Do.....	July 6-19.....	14	10	
Karachi.....	May 18-June 28.....	51	18	
Do.....	June 29-July 26.....	8	7	
Madras.....	May 18-June 28.....	32	10	
Do.....	June 29-July 19.....	14	2	
Rangoon.....	May 11-June 28.....	53	21	
Do.....	June 29-July 19.....	11	5	
Indo-China:				
Saigon.....	Apr. 27-June 28.....	145	79	Including 100 sq. km. of sur- rounding country.
Iraq:				
Bagdad.....	Apr. 30-May 24.....	8	1	
Italy:				
Messina.....	May 26-June 1.....	1	-----	
Jamaica.....				June 1-28, 1924: Cases, 141. June
Kingston.....	June 1-28.....	6	-----	29-Aug. 2, 1924: Cases, 132.
Do.....	June 29-July 19.....	7	-----	(Reported as alastrim.)
Japan:				Reported as alastrim.
Kobe.....	May 26-June 21.....	3	-----	
Nagoya.....	June 8-14.....	2	-----	
Tokio.....	do.....	1	-----	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to September 5, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Java:				
East Java—				
Madoera Residency—				
Sampang.....	May 22.....	5	1	Epidemic.
Malang.....	May 25-31.....	501	143	
Soerabaya.....	Apr. 13-June 28.....			
West Java—				
Batavia.....	May 31-June 27.....	3		
Do.....	July 6-12.....	1		
Latvia				Apr. 1-May 31, 1924: Cases, 2.
Mexico:				
Durango.....	June 1-30.....		2	
Guadalajara.....	May 1-June 30.....	9	4	
Do.....	July 8-14.....		1	
Mexico City.....	May 4-June 28.....	96		Including municipalities in Federal district.
Do.....	June 29-Aug. 2.....	34		
Salina Cruz.....	May 25-31.....	1	1	
Tampico.....	June 14-20.....	2		
Do.....	July 1-31.....	7	6	
Tuxtepec.....	July 3-18.....	3	1	State of Oaxaca.
Palestine				June 17-23, 1924: 20 cases in northern district.
Samaria Province—				
Samak.....	May 27-June 2.....	1		
Paraguay:				
Asuncion.....	June 2.....			Present.
Encarnacion.....	do.....			Many cases reported.
Poland				Mar. 30-June 7, 1924: Cases, 261; deaths, 21.
Portugal:				
Lisbon.....	May 25-June 28.....	7	2	
Do.....	June 29-July 19.....	4	1	
Oporto.....	May 11-June 28.....	18	16	
Do.....	June 29-Aug. 2.....	10	10	
Russia				Jan. 1-31, 1924: 2,243 cases.
Siam:				
Bangkok.....	Apr. 27-June 14.....	3	5	
Spain:				
Barcelona.....				Year 1923: Cases, 160.
Malaga.....	June 29-Aug. 9.....		13	
Valencia.....	June 8-21.....	3		
Do.....	July 13-19.....	1		
Straits Settlements:				
Singapore.....	May 4-24.....	2	1	
Sumatra:				
Medan.....	Jan. 1-31.....	5		
Switzerland:				
Berne.....	May 25-June 28.....	22		
Do.....	June 29-July 26.....	9		
Syria:				
Damascus.....	May 28-June 12.....	12		
Tunis:				
Tunis.....	May 27-June 30.....	17	4	
Do.....	July 1-Aug. 4.....	6	8	
Turkey:				
Constantinople.....	June 1-7.....	1		
Union of South Africa:				
Cape Province.....	May 4-31.....			Mar. 1-May 31, 1924: Cases, 133 (white, 15; native, 118). June 29-July 5, 1924: Outbreaks.
Orange Free State.....	May 4-10.....			Outbreaks.
Transvaal.....	May 4-31.....			Do.
Johannesburg.....	July 6-12.....	1		Do.
On vessel:				
S. S. Karoa.....	May 7.....	1		At Durban, South Africa, from Bombay, India. Vessel left Bombay Apr. 16, 1924. Patient, European.
S. S. Mount Evans.....	July 8.....	1		At Key West, Fla., from Manchester, England.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to September 5, 1924—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	May 1-June 30....	24	9	
Bolivia:				
La Paz.....	July 1-31.....		1	
Brasil:				
Porto Alegre.....	June 1-7.....		1	
Chile:				
Antofagasta.....				June 16, 1924: Two cases in Laza-
Concepcion.....	May 20-26.....		3	retto.
Do.....	July 8-21.....		3	
Iquique.....	June 22-28.....		1	
Talcahuano.....	May 25-31.....	2		
Do.....	June 29-July 26.....	16	4	
Valparaiso.....	May 25-June 21.....		11	
Do.....	June 29-July 19.....		5	
China:				
Antung.....	June 2-16.....	6		
Chungking.....	May 11-June 14.....			Present.
Chosen:				
Chemulpo.....	May 1-June 30.....	10		
Seoul.....	do.....	43	5	
Egypt:				
Alexandria.....	June 25-July 22.....	3		
Cairo.....	Feb. 19-May 20.....	38	9	
Port Said.....	July 24-29.....	2		
Estonia.....				Apr. 1-May 31, 1924: Cases, 32.
Germany:				
Coblenz.....	July 13-19.....	2		
Great Britain:				
Ireland—				
Dublin.....	June 8-14.....	1		
Do.....	July 13-19.....	1		
Lismore.....	July 19.....	1		
Longford.....	do.....	1		
Greece:				
Saloniki.....	Apr. 20-May 4.....	6		
Iraq:				
Bagdad.....	Apr. 27-May 10.....	2		
Latvia.....				Apr. 1-May 31, 1924: Cases, 82.
Mexico:				
Durango.....	July 1-31.....		2	
Guadalajara.....	May 1-June 30.....	2	2	
Mexico City.....	May 4-June 28.....	59		Including municipalities in Fed-
Do.....	June 29-Aug. 2.....	40		eral district.
Torreón.....	July 1-31.....		2	Do.
Palestine:				
Jaffa.....	June 17-23.....	1		
Do.....	July 8.....	1		
Jerusalem.....	July 1-28.....	2		
Kantara.....	July 15-21.....	1		
Poland.....				Mar. 30-June 7, 1924: Cases, 2,616;
Portugal:				deaths, 252.
Oporto.....	June 15-21.....		1	
Russia.....				Jan. 1-31, 1924: 14,275 cases.
Spain:				
Barcelona.....	July 10-16.....		1	
Syria:				
Aleppo.....	June 8-14.....	1		
Tunis:				
Tunis.....	May 27-June 9.....	4		
Turkey:				
Constantinople.....	May 18-June 21.....	7	2	
Do.....	July 6-19.....	1	1	
Union of South Africa.....				Mar. 1-May 31, 1924: Cases, 344;
Cape Province.....				deaths, 35 (white, cases, 20;
Do.....				deaths, 1; native, cases, 324;
Natal.....				deaths, 34).
Do.....				Mar. 1-May 31, 1924: Cases, 203;
Urban.....	Apr. 20-26.....	1		deaths, 17.
				June 1-7: Outbreaks.
				Mar. 1-May 31, 1924: Cases, 18;
				deaths, 3.
				June 1-7: Outbreaks.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to September 5, 1924—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Orange Free State.....				Mar. 1-May 31, 1924: Cases, 64; deaths, 9.
Do.....				June 1-July 5: Outbreaks.
Transvaal.....				Mar. 1-May 31, 1924: Cases, 39 deaths, 5.
Johannesburg.....	May 11-24.....	2		
Do.....	June 29-July 5.....	1		

YELLOW FEVER.

Brazil:				
Pernambuco.....	May 11-17.....	2	1	
Salvador:				
San Salvador.....	June 10-Aug. 25.....			Present in San Salvador and vicinity.